

A SOCIOLOGICAL EXAMINATION OF ILLICIT PRESCRIPTION  
DRUG USE AMONG PHARMACISTS

By

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This research investigates pharmacists' illicit use of prescription drugs. In particular, it considers the ways that various educational, occupational, and professional socialization processes affect the onset and progression of such behaviors.

Data were gathered using three data separate collection efforts. First, fifty personal interviews were conducted with pharmacists recovering from drug abuse. Second, the apprehension reports for all drug-related investigations ( $N = 89$ ) conducted by the security departments of two major retail pharmacy chains between 1991 and 1996 are analyzed. A mailed, anonymous, self-report survey was used to query a random sample of 1,016 U.S. practicing pharmacists. The personal interview and apprehension report data were analyzed using a standard form of content analysis. The survey data were analyzed using descriptive statistics, ordinary least squares regression, and logistic regression.

The results suggest that substantial numbers of pharmacists engage in illicit prescription drug use. Over one-half (58.4%) of the practicing pharmacists from the survey inquiry reported at least one lifetime illicit prescription drug use episode, 30.7% reported five or more lifetime episodes, and 5.6% identified themselves as drug abusers.

Collectively, the results suggest that some drug using pharmacists tend to develop surprisingly extensive drug use habits that involve the theft and use of multiple controlled substances. The analysis shows that being and becoming a pharmacist is central to the onset and progression of the individual's drug use. In pharmacy school, students receive limited substance abuse education and the college culture exposes them to social acceptance toward the recreational use of prescription drugs. In the workplace, coworkers expose pharmacists to relaxed attitudes and behaviors regarding the therapeutic use of prescription drugs. The professional socialization process contains conflicting messages about drugs. Unrestricted access and constant social reinforcement about the positive potentials of prescription drugs fosters a benign overconfidence toward drugs.

I conclude that pharmacists knowledge and familiarity with drugs contributes to a mind-set wherein individuals come to believe that they are immune to drug abuse and thus capable of monitoring their own therapeutic usage. The theoretical discussion calls for an expansion of the medical model approach to substance abuse wherein social factors are included. Numerous preventative policy implications also are presented.

## CHAPTER I INTRODUCTION

More than 1.6 billion drug prescriptions are filled in the United States each year (Wivell & Wilson, 1994). Every day, hundreds of thousands of Americans walk into their local drug stores and rely on pharmacists to accurately dispense their medications. What the public does not realize, however, is that some of the pharmacists filling their prescriptions are themselves using the drugs that they are entrusted to dispense.

Lay persons tend to be surprised to learn that the pharmacy profession is confronted with problems of illicit prescription drug use among its ranks. After all, the pharmacy profession is highly regarded by the general public. For a decade, annual public opinion polls ranked pharmacy as the most honest and ethical occupation, above even the clergy (McAneny & Moore, 1994). Beyond the high ethical ratings, there is a more fundamental basis for our dismissing suggestions that significant numbers of pharmacists engage in illicit prescription drug use--we assume that pharmacists, perhaps more than any other members of society, are above such behaviors. We perceive pharmacists as highly educated "drug experts." We point to the fact that they have achieved a highly prestigious status as a medical professional. Both their employers and patients entrust them with the important responsibility of dispensing controlled medical substances. It is difficult to accept that pharmacists sometimes put aside what they have learned about the harmful nature of controlled substances, that they breach the very trust that we grant them, and that they commit what most would see as a serious professional violation of which they

are capable. Yet, the National Association of Retail Druggists (NARD, 1988) estimates that, profession-wide, one in seven pharmacists suffers from chemical dependency at some point in their careers.

The present study draws upon multiple sources of data to consider the nature and dynamics of pharmacists' illicit drug use.<sup>1</sup> Ironically, much of this illicit drug use can be attributed to the very educational, occupational, and professional factors that are crucial to the process of becoming a pharmacist. My discussion frames pharmacists' use of illicit drugs as incidents of "trust violations" (Cressey, 1953) in which individuals use their professional position to perpetrate, perpetuate, and justify their deviant behaviors. In particular, I will argue that social factors such as a lack of training on the psychological aspects of drug abuse, exposure to peers or mentors who engage in or condone self-medication practices, and a benign belief system in their ability to self-medicate are consistently related to pharmacist's drug use behaviors.

This study is not confined to illicit prescription drug use among pharmacists. It also focuses on how we conceive of, manage, and react to the broader phenomenon of drug abuse,<sup>2</sup> both within the pharmacy profession and through society as a whole. At present, the majority of the research, literature, and policies treating drug abuse among pharmacists (and drug abuse in general) draws heavily on a medical model explanation (Jellinek, 1960): one's drug abuse condition is conceived of as a bio-psycho-social disease. The onset, progression, and maintenance of an individual's drug use behaviors are said to be symptomatic of a personal pathological condition. The source of the pathological condition is principally attributed to predisposing biological--genetics--or psychological--early childhood development--factors.

A medical model orientation focuses little attention on the ways in which social or environmental conditions influence an individual's drug use and abuse situations. There is little interest in the effect of social factors on the onset, progression, or maintenance of an individual's drug use behavior. Instead, social factors receive only secondary attention and are usually described as facilitators, catalysts, or enabling mechanisms to an individual's drug use behaviors.

The educational, occupational, and professional experiences of pharmacists are wholly social in nature. These experiences have no biological origins and occur during the adult stages of individuals' lives. Thus, they are of little concern to medical model scholars who explain the problem of drug use among pharmacists. The present study presents evidence that links the educational, occupational, and professional experiences of pharmacists to the onset, progression, and maintenance of their illicit prescription drug use. I show that social factors not only affect pharmacists' drug use behaviors, but they also contribute to the progressive and problematic psychological, emotional, and physical conditions that have come to be associated with the broader phenomenon of drug abuse. We need to critically examine and expand upon the dominant medical model orientations to drug use and abuse. Namely, scholars need to become more sensitive to the role that social factors play in all facets of individuals' drug use and abuse.

This dissertation has seven chapters, namely, problem statement, literature review, research methodology, three findings chapters, and a summary and implications chapter.

The problem statement chapter justifies more research on the topic of pharmacists' illicit prescription drug use. This chapter begins by conceptually positioning the topic of pharmacists' illicit prescription drug use within the sociological discipline, and then it defines the behaviors, concepts, and issues that will be considered in the present study.

This definitional exercise is necessary because ongoing discussions of drug related topics have produced diverse conceptualizations, vocabularies, and assumptions.

The problem statement chapter also discusses the significance of the present research project. First, I demonstrate that significant numbers of pharmacists illegally use prescription medicines. This unique form of drug use requires further investigation. Next, I establish that the present research topic lies at the nexus of several sub-disciplines within sociology. This conceptual position offers an opportunity theoretically to inform numerous scholarly audiences. Finally, I present the many practical consequences associated with pharmacists' illicit prescription drug use. Namely, discussion centers on the ways in which pharmacists' illicit prescription drug use harms the general public, pharmacy employers, the profession at large, and the individual pharmacist.

The problem statement chapter concludes with a precise listing of the project's principal questions. Here, the specific educational, occupational, and professional influences that can be linked to pharmacists' illicit prescription drug use are outlined.

The literature review chapter surveys the existing literature on pharmacists' use of controlled substances,<sup>3</sup> employee deviance, the use of controlled substances in other occupational settings, educational socialization among pharmacists, the pharmacy work culture, and pharmacy professionalization. The purpose here is twofold. First, the discussion offers the reader insight into the contemporary empirical and theoretical understandings of the present research topic. Second, it introduces and reviews literature from the substantive areas of drug abuse, workplace deviance, medical sociology, and occupations and professions. These studies help substantiate the theoretical framework of the present study.

The research methodology chapter explains the sampling, data collection procedures, measurement, and data organization and analysis plans associated with each of the three data sources used in this study. These data sources include 1) in-depth interviews with a snowball sample of 50 pharmacists with extensive drug use histories; 2) incident reports detailing 89 officially discovered cases of pharmacists' drug related wrongdoings in the retail pharmacy environment, and 3) a self-administered questionnaire survey of a random sample of 1016 practicing pharmacists. The chapter concludes with a discussion of how this multi-method inquiry process is synthesized.

Next, the study's research findings are presented in three separate chapters. The first findings chapter outlines the results of the interview component. The second findings chapter presents data from the archival incident report component. The third findings chapter reviews the data from the survey component

The summary and implications chapter addresses several issues. It begins by drawing together the evidence from the three findings chapters. Specifically, I outline the educational, occupational, and professional factors that have previously been shown to influence pharmacists' illicit prescription drug use. Next, I suggest ways in which these findings can be used to inform us about the broader phenomenon of drug abuse. This chapter will also consider the limitations of the present research project. The dissertation concludes with a discussion of the study's policy and theory implications.

### Notes

1. In the context of the present study, the term illicit prescription drug use/user represents a legal distinction. This concept is meant to refer only to the illegal use of prescription medications as outlined in the Controlled Substance Act of 1970. It includes the use of mind altering, prescription medications when such use is done without a legitimate prescription order that has been signed or authorized by a licensed, FDA approved,

physician. The use of prescription medications without an authorizing prescription order constitutes illicit prescription drug use regardless of whether such medications were procured from pharmacy stock, from a street level drug dealer, or any other illicit market source. My use of the term illicit prescription drug use does not refer to the use of those mind altering controlled substances that are deemed to have no medicinal purposes and thus are classified as "Schedule I" substances under the Controlled Substance Act of 1970 (e.g., marijuana, hashish, heroin, industrial inhalants, hallucinogens such as LSD). Moreover, the term illicit prescription drug use does not include the use of prescription medications when such use is done in accordance with the instructions on a physician authorized prescription order, regardless of how substantial or prolonged the use may be. The term illicit prescription drug use does not include the use or abuse of alcohol. Also, note that this concept carries no functional distinction. That is, it is not intended to speak directly to any physical, emotional, or mental consequences or resulting states of behavior/consciousness associated with an individual's use of any prescription medicine. Issues related to an individual's drug related behavioral or mental functionality will be referred to under the heading of "drug abuse", "impairment" or "problematic drug use."

2. The term "drug abuse" focuses on the consequences of drug use, not the use itself. To this end, it is concerned with appraisals of functional or acceptable drug use. Any drug use, regardless of whether it is deemed illicit or not, that results in negative physical, social, and/or professional consequences is said to be indicative of a drug abuse condition. What constitutes a negative consequence can be determined by the individual user, or, as is more often the case, by some external appraisal. This type of functional appraisal of drug use outcomes is closely related to the concepts of "drug impairment" and "problematic drug use."

3. Given the paucity of literature focused explicitly on what I refer to as "pharmacists' illicit prescription drug use" (see note 1 above) this section includes the existing literature on the etiology, occurrence, prevention, and management of pharmacists' use of many controlled substances.



## CHAPTER II PROBLEM STATEMENT

### Framing the Research Problem

Scholarly discussions on drug related topics are often hindered by fundamental definitional issues. Misunderstandings arise when discussants use terms or concepts with multiple meanings or interpretations. To avoid this problem, it is necessary to clarify the terms, concepts, and issues that appear in the present project.

This study is principally concerned with pharmacists' illicit prescription drug use. Illicit prescription drug use refers only to drug use that violates the provisions of the Controlled Substance Act of 1970. The Controlled Substance Act of 1970 stipulates how prescription pharmaceuticals are to be legally defined, handled, dispensed, and utilized in our society. From the start of their pharmacy training, pharmacists are made keenly aware of the interpretations, applications, and guidelines from this important piece of legislation. This piece of legislation is a cornerstone of pharmacy practice and shapes the pharmacist's daily prescribing practices. When a pharmacist knowingly uses a drug without first obtaining a prescription, he/she is knowingly violating the Controlled Substance Act of 1970. Such a violation represents a breach of the core governing principles of the pharmacy profession and falls under the rubric of employee deviance.

Donald Cressey (1953) was one of the first sociologists to systematically investigate the nature and dynamics of employee deviance. In his classic analysis of embezzlement, Cressey asked convicted embezzlers to recount the behaviors and

motivations associated with their financial wrongdoings. He described their acts of embezzlement as a form of "trust violation." His data link these acts of embezzlement to the individuals' insider knowledge of their work environment and their interpretations of the organizational culture within which they are embedded. When confronted with a need for a quick financial fix, these individuals used their heightened understanding and familiarity with the intricacies of bookkeeping to fill it. Moreover, they used these same organizational understandings and their position of trust to conceptualize their behaviors as being legitimate and non-deviant. Using what Cressey called "vocabularies of adjustment," they defined their continued and extensive thefts as instances of well-intentioned borrowing in which they were using nonessential company funds to help themselves out of tight financial spots. In short, his data show that embezzlers neutralize their normative appraisals of their own theft behaviors by contextualizing them within the framework of their employment situation.

Cressey argued that these vocabularies of adjustment were causally related to the embezzlers' trust violating behaviors. He insisted that individuals did not simply enlist these cognitive mechanisms as *ex post facto* explanations or justifications for past behaviors. He claimed that they also served as *a priori* mechanisms allowing for the onset of theft behaviors.

The phenomenon of pharmacists' illicit prescription drug use<sup>1</sup> is analogous to Cressey's embezzlers. Most of a pharmacist's contact with prescription medications occurs under autonomous and unsupervised working conditions. Their employers and the public must rely largely on the pharmacist's internalized professional identity and informal professional norms to prevent pharmacists from abusing their dispensing authority. This dissertation considers the paradoxical role played by these supposed control mechanisms

in the onset and progression of pharmacists' illicit prescription drug use. In particular, pharmacists use their professional standing and familiarity with controlled substances to convince themselves that their own personal drug use (i.e., trust violation) is acceptable. To this end, being and becoming a pharmacist serves as a contributing factor to the onset and progression of trust violating drug use behaviors.

While some drug-using pharmacists engage in alcohol use and/or the use of nonprescription drugs (defined as Schedule I substances under the Controlled Substance Act of 1970), this project is not directly concerned with such use. The use of alcohol or street drugs (e.g., marijuana) does not involve the same form of ethical violation that is associated with prescription drug use. As such, it is unlikely that issues of professional identity and informal social control play the same role in the onset and progression of these behaviors.

From time to time, as with any human beings, pharmacists develop ailments and avail themselves of doctor-prescribed medications. In some cases, a pharmacist's position as a health care professional may lead to excessive or prolonged prescribing patterns that are supported by a doctor's legitimate prescription. The present analysis is not directly concerned with pharmacists' use of *bona fide* prescription medications done under the supervision of a prescribing physician. This distinction does not discount the possibility that pharmacists can and do develop drug abuse situations due to a doctor's ignorance. Moreover, it does not deny that it is possible for codependent drug use relationships to arise between pharmacists and their prescribing physicians. However, when a pharmacist develops a prolonged and progressive drug use/abuse condition while under the supervision of a prescribing physician, he/she is not involved with the same ethical breach of trust as a pharmacist who engages in illicit prescription drug use. In the former

situation, the pharmacist's use/abuse of the drugs is implicitly or explicitly sanctioned by a doctor and is not therefore an independent trust violation.

Past research (Bissell et al , 1989) shows that a pharmacist's ability to perform his/her daily job related functions is hindered by the physiological or mental effects of the drugs that he/she ingests. When a pharmacist's work suffers from his/her drug use, he/she is said to be "impaired." Pharmacists' impairment raises numerous practical and theoretical issues. Although the present analysis speaks to the ways that a pharmacist's illicit use of drugs affects his/her work productivity, such considerations are of secondary importance. Job performance issues will be highlighted only when they can be linked back to breaches of professional responsibility. That is, I will be concerned with the linkages between the individual's self-definition of impairment and his/her standards of what constitutes acceptable behavior for a practicing pharmacist.

Why should we learn more about illicit prescription drug use among pharmacists? This question is best answered by focusing on three issues. First, one must consider the available data on the extent of the problem. We know that significant numbers of pharmacists engage in unauthorized prescription drug use. At the least, this concentrated prescription drug use among members of a single community of professionals represents an intriguing research question in need of further study. Second, a study of illicit prescription drug use among pharmacists potentially augments our understanding of several substantive areas of sociology: This study should benefit scholars studying deviant drug use, work place deviance, medical sociology, and occupations and professions. Finally, additional research on illicit prescription drug use among pharmacists is needed to illumine the practical ramifications of such behaviors. pharmacists' drug use has negative consequences for the affected individuals, their families, their employers, the profession,

and most importantly, the public's welfare. Given that the existing theoretical and policy approaches to the problem have done little to curb the problem, perhaps it is time that we pursue fresh perspectives. Hopefully, the present study will provide new insight that will assist future policy makers.

### The Extent of Illicit Prescription Drug Use among Pharmacists

How prevalent is the illicit prescription drug use problem in the pharmacy profession? Simply stated, there are no accurate incidence or prevalence data, only rough estimates. Two small-scale, regional studies provide indications of the problem's extent. A survey conducted in New York (McAuliffe et al., 1987) found that 46% of the 312 practicing pharmacists surveyed had used some form of controlled substances at least once and 19% had done so within the past year. However, these numbers include both the use of street and prescription drugs and do not adhere to the more limited definition of illicit prescription drug use in the present study. The New York data further suggest that pharmacists tend to use drugs more often for therapeutic, self-treatment purposes than for recreational purposes. 21% claimed that their use was "instrumental" to their work. Measures of problematic drug use in the New York sample show that 2.3% of the respondents admitted drug dependency,<sup>3</sup> 8.9% reported experiencing adverse effects in their private or professional life due to their usage, and another 6% were identified as being at risk of drug dependency.<sup>3</sup> The authors conclude that 18% of the respondents were dependent on drugs, or at risk of drug dependency.

Another study conducted among practicing North Carolina pharmacists (N = 1,370) revealed that 24% of the respondents had worked with a colleague who they believed was abusing or addicted to drugs (Normack et al., 1985). This study estimated

that 21% of the respondents admitted to personal behaviors that place themselves at risk of chemical impairment <sup>4</sup>

Extrapolating from the available estimates of drug use/abuse onto the overall population of over 190,000 practicing pharmacists nationwide (Martin, 1993), one might conservatively estimate that tens of thousands of pharmacists presently engage in some form of illicit prescription drug use behavior. Moreover, the prevalence data suggest that a considerable segment of this drug using sub-population of pharmacists engages in high levels of usage and/or experience personal or professional problems that they themselves define as problematic

#### Sociological Significance of the Problem

Illicit prescription drug use among pharmacists represents an intriguing sociological problem. For the sociologist who studies deviant drug use or abuse, the issue of illicit prescription drug use among pharmacists raises numerous research questions. Most fundamentally, this topic poses an opportunity better to understand the dynamics of drug use and abuse within a select population of professionals. This initial research focus spawns a host of more specific research questions, including, but not limited to, the following: what factors are associated with the onset of an individual's illicit prescription drug use, what are the techniques and motives associated with the individual's illicit prescription drug use, and what are the levels and patterns of usage associated with an individual's drug use career? Collectively, information of this kind can be used to inform theories and policies aimed at understanding and confronting drug abuse problems.

Pharmacists' illicit prescription drug use also complements the interests of sociologists studying deviance in the workplace. Sociologists are increasingly concerned

with such topics as the effects of drug use in the work place, employee theft, and the social and organizational factors that affect varying rates and forms of workplace deviance. Given that the existing literature demonstrates that the majority of drug using pharmacists also engage in the theft and use of drugs while at work, this topic offers an opportunity to explore how organizational culture, social controls, and socialization issues connect with specific acts of deviance committed in the pharmacy workplace. By approaching pharmacists' illicit prescription drug use as instances of deviant trust violation, we are better able to attribute such behaviors to professional ethics, work group norms, and the learning processes associated with such issues.

For medical sociologists, drug use among pharmacists speaks to several contemporary research and policy interests. The medical sociology literature has long focused attention on various aspects of the educational process within the health professions. Pertinent issues have included the development and dissemination of ethical standards and the role that the educational process plays in the long term attitudes and behaviors of its members. The present study allows us the opportunity to further our understandings of the intricacies of the formal and informal socialization and social control processes within the pharmacy profession. In particular, it offers insight into the ways in which socialization processes may contribute to the onset and progression of a specific form of deviant behavior--illicit prescription drug use among pharmacists.

A study of drug use among pharmacists also benefits sociologists specializing in the study of occupations and professions. Numerous scholars have studied alcoholism and its manifestations within certain work groups whose occupational or professional cultures place them in close proximity to the sale or use of alcohol (Fillmore & Caetano, 1982). The present research offers an opportunity to consider a similar form of occupational

deviance in which pharmacists abuse the very drugs that they are entrusted to dispense. This issue becomes significantly more intriguing when one considers that the pharmacy profession's central occupational identity is inextricably linked to its unchallenged role as the sole legitimate authority in charge of the dispensing and monitoring of prescription medicines. As such, illicit prescription drug use among pharmacists is a manifestation of the most problematic form of occupational deviance that a pharmacist can commit.

### Practical Significance of the Problem

Most obviously, illicit prescription drug use among pharmacists almost always affects their ability to fulfill their professional responsibilities. An individual's progressive illicit prescription drug use inevitably spills over into his/her working hours and compromises or impairs his/her abilities. This situation raises obvious concerns for the general public: A drug impaired mental and physical state could potentially affect any one of the crucial components of a pharmacist's daily work tasks. For example, the drug impaired pharmacist might misread the doctor's prescription form. Their impairment might lead to carelessly dispensing the wrong type of medication from a shelf. A state of reduced mental alertness might result in a failure to identify and correct potentially harmful drug interactions. He/she might inaccurately measure out the various dosage units of potentially lethal prescription medications. Finally, he/she might provide the patient with improper administration instructions. Any one of these mishaps can result in injurious or fatal consequences for the unsuspecting patient who depends upon the actions of an alert and capable pharmacist.

A pharmacist's illicit prescription drug use can also have negative consequences for his/her employer. Regardless of the occupational setting--retail pharmacy or hospital



pharmacy--drug use among pharmacists means financial losses for their employers. Potential litigation is one of the most alarming financial concerns facing employers of illicit drug using pharmacists. When the potential harms to consumers outlined above become reality, the pharmacy employer runs the risk of being targeted for civil litigation and large financial negligence judgments. In fact, multi-million dollar judgments against employers have resulted (Brushwood, 1986). Granted, pharmacy malpractice suits are rare, but the precedence of large financial awards make them a monumental concern for pharmacy employers.

Public relations issues pose another concern for pharmacy employers. Although drug-related malpractice suits may result in financial losses from civil judgment, the potential dollar loss from negative public relations are a far more pressing and costly concern. The volatile nature of this issue is heightened by the potential for adverse media coverage. In the best-case scenario, media coverage of a pharmacist's illicit prescription drug use results in the dissemination of facts related to the situation and implies that the problem can be solved by specific, local actions taken against the individual pharmacist. In the worst-case scenario, media accounts sensationalize the negative potential and place the focus on the employer's negligence. Either way, consumers may choose to patronize other pharmacy providers.

Moreover, drug using pharmacists almost always steal drugs to satisfy or expand their illicit prescription drug use behaviors. These thefts represent the most direct and immediate form of financial loss, linked to illicit prescription drug use behaviors, for their employers. Given that the drug theft feeds illicit prescription drug use behaviors, one must confront the use problem to address the drug theft problem.

The potential for this drug use/drug theft interaction to develop is amplified by the very nature of the pharmacist's job. Pharmacists have open access to a wide variety of medications. They have low levels of supervision and are granted high levels of autonomy in accounting for these medications. Moreover, they are familiar with and often control the purchasing, dispensing, and accounting functions in their places of work. All of these factors facilitate the potential for pharmacists to engage in significant and prolonged drug theft followed by illicit prescription drug use patterns without any real accountability.

The extent of pharmacists' illicit prescription drug use may be exacerbated by the pharmaceutical expertise possessed by the individual in question. Since pharmacists are keenly aware of the various physiological effects of prescription medications and understand the nature of drug interactions, they can easily self medicate themselves to "walk a chemical tightrope." Past research on recovering impaired pharmacists (Bissell et al., 1988) suggests that drug using pharmacists often experiment with drugs, ingesting different dosages, combinations, and drug types in an effort to counteract the negative side effects of one substance with another. Not only do such situations mean larger financial losses for pharmacy employers, but also, they place the consumer at even greater risk and increases the potential for pharmacists to develop prolonged and very intense drug theft/use careers.

The presence of drug using pharmacists raises several problems for the pharmacy profession as a whole. First and foremost, such behaviors represent a serious form of professional misconduct in which a pharmacist can engage. Although, accorded respect and social status, pharmacists' social credits are counterbalanced with expectations of accountability and high-quality professional performance, especially when it comes to dispensing prescription medications. When a pharmacist uses drugs without a prescription,

he/she violates the foundation of his/her professional existence, and engages in precisely the behavior against which the pharmacy profession was intended to guard against.

Norms of professional conduct seem to allow no latitude for serious ethical violations, especially when such violations result in the kinds of personal, organizational, or profession-wide irresponsibility that invariably accompany pharmacists' illicit drug using behaviors. Since the mass media views such incidents as being extremely newsworthy, they pose the potential for widespread public relations frenzies rendering the entire profession vulnerable to unwelcomed attention and scrutiny. Consequently, the pharmacy profession is sensitive to the potential that individual drug-related deviations have to endanger the trust, respect, and social status afforded the profession.

The issue of pharmacists' illicit prescription drug use indirectly causes attrition problems for a profession already in very high demand. Faced with a growing demand for pharmacists and a relatively stable number of practicing pharmacists, the profession has been forced to address the fact that it cannot afford to lose significant numbers from its ranks due to the drug abuse that results from pharmacists' prolonged illicit prescription drug use. In recent years, the pharmacy profession has committed a great deal of energy and resources to understanding its impairment problems and recognizes that research on the topic can pay valuable long-term dividends. There has recently been a concerted effort to head off the myriad of mental, physical, and emotional problems that drug abuse causes for all involved parties.

Much of the reaction on the part of employers and the profession has humanitarian foundations. There is a growing consensus that concerns about illicit prescription drug use among pharmacists should be focused on the affected individual. Obviously, pharmacists who engage in prolonged illicit prescription drug use experience considerable mental,

physical, and emotional problems. These individuals tend to fall into a downward spiral of progressive drug use that has a wide variety of problems for themselves and their loved ones.

Despite the presence of numerous negative consequences and relevant sociological issues raised by pharmacists' illicit prescription drug use, our present understanding of the phenomenon is relatively limited. There is a paucity of literature and research on the social sources of pharmacists' illicit prescription drug use. These needs are particularly important since they represent the prerequisite foundation upon which a sociologically based understanding of the phenomenon must rest

#### Specific Research Foci

The goals of this research endeavor are both descriptive and analytical. First, the project seeks to profile the individuals and events associated with pharmacists' illicit prescription drug use behaviors. Multiple sources of data will be utilized to detail the following issues: the onset of pharmacists' illicit prescription drug use, the various methods of drug procurement that they employ, the types of drugs that are commonly used, the patterns of drug usage, the stated and perceived reasons and rationalizations for initial and progressive drug taking, and the various personal and professional consequences and sanctions that result from pharmacists' drug use.

Next, insight from the three data sources will be used to construct a theoretical framework that expands upon the medical model orientation to drug abuse. This analytical task will be accomplished by first identifying various social factors that are consistently present among three different groups of illicit prescription drug using pharmacists. In

particular, the discussion emphasizes the ways in which educational, occupational, and professional factors affect the etiology of pharmacists' illicit prescription drug use.

The observations on the illicit prescription drug use of pharmacists are then used as the basis for a more general theoretical discussion of drug abuse. In particular, consistent facilitating relationships between various social factors and the onset, maintenance, and progression of pharmacists' illicit drug use are used to argue for an expansion of the prevailing medical model orientation to drug abuse. The importance of educational, occupational, and professional influences in an individual's drug abuse condition suggests shortcomings and limitations to the medical model orientation to the drug abuse phenomenon and hence warrant a broader theoretical orientation to the problem.

Educational foci My theoretical framework explores the ways that the educational experiences of pharmacists affect pharmacist's drug related behaviors. Several past researchers (Baldwin et al., 1991, McAuliffe et al., 1987, Miederhoff et al., 1977) have found considerable levels of recreational drug use among pharmacy students. The present research will attempt to determine if and how levels of college drug use effect individual's progressive post-graduation drug use, theorizing that relaxed attitudes and experience with recreational drug use will add to the likelihood of continued use.

Several scholars (e.g., Bissell et al., 1988; Kurzman, 1972; McDuff et al., 1995) have shown that most pharmacy students receive only cursory training on the psychological aspects of drug abuse. I will explore the status of such training in an effort to determine how prepared pharmacists are to recognize, counsel, and combat problematic drug use in themselves and others. I expect that a lack of a well rounded drug abuse education will contribute to illicit prescription drug use potentials.

My inquiry will also focus on prevailing formal and informal socialization processes that are present within the pharmacy school environment. In particular, I will argue that the pharmacy school experience instills in pharmacists a relaxed, arrogant attitude toward prescription medicines that leaves them more vulnerable to self medication practices.

Occupational foci. The theoretical framework of this study also draws upon a series of occupational or workplace specific research foci in an effort to demonstrate their relationship to the behavioral and/or perceptual aspects of pharmacists' illicit drug use. In particular, the issue of early occupational training or mentorship will be considered in depth. Given the long term, formative potential of mentoring relationships, I expect that exposure to mentors with relaxed attitudes and/or behaviors toward self-medication will facilitate neophyte pharmacists' subsequent prescription drug use.

The nature of the drug related attitudes and behaviors of other pharmacy co-workers will also be considered as a potential contributing factor to pharmacists' illicit prescription drug use behaviors. Based on the assumption that individuals are influenced by their work culture, I expect that exposure to pro-drug use norms will increase the likelihood of personal drug use.

Inquiry and analysis will focus on the availability and implementation of organizational in-service training specific to the issue of drug use. I will examine the nature and extent of such training, theorizing that an illicit prescription drug using pharmacists report having been exposed to low levels of training.

Quinney (1963) found that competing business versus health care goals within pharmacy practice (i.e., role strain) was related to prescription violation deviance among

pharmacists. The present inquiry will attempt to determine if such role strain still exists and, if so, how it impacts upon pharmacists' illicit prescription drug use.

Professional foci. Lastly, a series of research questions specific to professional socialization will be considered. Issues of professional identity, such as the tendency of pharmacist to conceive of themselves as "drug experts," will be considered as contributing factors in the onset, progression, and denial of problematic drug use. I expect that a combination of familiarity and overconfidence in their understanding of prescription medicines will make pharmacists' vulnerable to self-medication practices.

Inquiry will also be focused on the ways in which the pharmacy profession characterizes and reacts to the problem of illicit drug use among its ranks. I will consider the way that such professional norms facilitate the drug-related perceptions and behaviors of pharmacists. Based on past research (Bissell et al., 1988, Normack et al., 1985a), I expect that drug using pharmacists will report having been exposed to signs of professional ignorance and tolerance.

The particulars of how each of the above specific research foci were pursued empirically will be addressed in the Methodology chapter of this document. Next, a review of the existing literature on the topic of illicit drug use among pharmacists, as well as other ancillary issues, will provide the reader with a background of information on the present research topic.

### Notes

1. While pharmacists' illicit prescription drug use is often preceded by acts of drug theft, these acts of theft are of secondary importance to the present study. For the purposes of this research, the actual illicit use of the drugs will be considered evidence of a "trust violation." Given that the illicit prescription drug use involves both the inappropriate dispensing and use of the very drugs over which pharmacists are given sole authority. I

view this use as representing a more serious violation than an incidence of theft.

2. The researchers asked respondents to indicate why they used drugs. One possible response category was "instrumental" use. This category was defined as use of "amphetamines or other stimulants (besides caffeine) to study, work, or perform better in athletics" (McAuliffe et al., 1987, 312).

3. Pharmacists in the McAuliffe et al. study were asked to offer a self-assessment of drug dependency to any one of a number of psychoactive controlled substances. This list included prescription as well as non-prescription medications. Individuals were classified as being at risk of drug abuse if they reported more than 100 total drug use episodes and experienced more than one drug-related interference with functioning (as determined by a standard checklist of items such as calling late to work due to substance use, seeking treatment, etc).

4. Normack et al. used a scaled usage inventory which sampled the presence and frequency of an individual's use of a variety of substances to establish their criteria for "impairment risk". Like the McAuliffe study, they did not limit their inquiry to prescription drug use. Anyone scoring more than a 2 on the usage scale that ranged from 0 to 4 was identified as being at risk.



### CHAPTER III LITERATURE REVIEW

The study of illicit prescription drug use among pharmacists cuts across numerous disciplinary boundaries. This topic lies at the intersection of numerous sub-disciplines within sociology (e.g., crime and deviance, occupations and professions, and medical sociology). As such, a need for a comprehensive review of the existing literature will allow me to build upon the various contributions of past research and to synthesize the theoretical foundation for the present research effort. The following review will be organized under a number of thematic areas including: pharmacists' use of controlled substances, employee deviance and the use of controlled substances in other work settings, educational socialization among pharmacists, the work culture of pharmacy, and professional socialization in pharmacy.

#### Literature on Pharmacists' Use of Controlled Substances

Pharmacists' use of controlled substances (i.e., drugs and alcohol) has long been a problematic issue within the profession. However, until a few decades ago, the profession was able to keep the topic out of the public spotlight. This "conspiracy of silence" was broken in 1982, when the American Pharmaceutical Association (APhA, 1982) issued a policy statement which acknowledged substance abuse as problem among its membership.

In an effort to explore the scope of the substance abuse problem, researchers from various medical professions reacted to the APhA policy statement by conducting studies

that focused on the extent of the problem among practicing pharmacists. Early studies (McAuliffe et al., 1987; Normack et al., 1985a) established that there is a considerable amount of illicit prescription drug use among practicing pharmacists. While these studies made significant inroads into our understanding of the extent of the substance use problem among pharmacists, their applicability to the present research is somewhat limited. First, both the McAuliffe and Normack studies utilized imprecise measures and definitions of drug use. Their principal goal was to assess the extent of pharmacists' substance use behaviors and as such included the use of prescription drugs, street drugs, and in the case of the Normack study, alcohol. Both research teams used these data to estimate levels of problematic drug use among pharmacists. This is a very different focus than the one being pursued in the present study. I am principally interested in the ethical dimension of pharmacists' drug use and have chosen to focus only on pharmacists' illicit use of prescription medications. Such a distinction temporarily moves the functional consequences of drug use (i.e., impairment or drug abuse) into a secondary role and focuses primarily on the ways in which being and becoming a pharmacist can contribute to an individual's use of the very substances that they are trained to monitor and control. This distinction is not meant to downplay the significance of the findings that the McAuliffe and Normack studies have produced. However, the present study will address different conceptual issues and hence should be expected to yield a different understanding of pharmacists' drug related behaviors.

The differences between the present study and both the McAuliffe and Normack studies are further demonstrated by the fact that these previous studies relied principally on medical model explanatory variables and largely ignored possible social factors. For example, the Normack study (Normack et al., 1985a) includes only a cursory discussion of

how structural workplace variables such as work environment (i.e., retail pharmacy vs. hospital pharmacy) are related to pharmacists' drug use. Moreover, the measures and the resulting discussion are noticeably underdeveloped. As such, readers may be misled into believing that social factors do not have an influence, when, in fact, their lack of significance may actually be attributable to measurement issues.

More importantly, the existing inquiries into the extent of pharmacists' drug use (McAuliffe et al., 1987; Normack et al., 1985a) are largely descriptive and offer little in the way of causal explanation. Thus, while they help frame the nature of the present research question, they do very little to explain the underlying etiology of the problem.

The most highly respected and most frequently cited research on the topic of pharmacists' use of controlled substances is a study conducted by LeClair Bissell, Paul Haberman, and Ronald Williams (Bissell et al., 1989). These researchers explicitly set out to offer a benchmark study that would better inform the profession about the etiology of pharmacists' substance abuse.<sup>1</sup> Specifically, they asked a snowball sample of 86 recovering pharmacists to describe their substance abuse experiences in hopes of explaining how and why substance abusing behaviors come about.

The Bissell study offers considerable insight on the topic of pharmacists' use of mind altering substances. For example, these researchers asked the respondents about the details of their substance abuse problem. Their data suggest that a near unanimous 99% claim to be addicted to alcohol.<sup>2</sup>

While the Bissell study employs a broad definition of substance use, they do break out data on pharmacists' use of prescription medications (i.e., the substances of interest in the present study). They show that 24% chose to principally use nonnarcotic prescription drugs, 22% used "mild" narcotics, and 31% focused their use on "strong" narcotics

Ingestible medications such as benzodiazepines and amphetamines were among the most popular. Conversely, the pharmacists reported very little use of injectable drugs.

It was not uncommon for respondents in the Bissell study to report using massive amounts of prescription medications on a daily basis. Moreover, significant numbers of the respondent pharmacists reported that they engaged in complex drug use patterns. They discussed the practice of "titrating" in which they would systematically ingest various combinations of medications that were aimed at counteracting the psychotropic and physiological effects of one another.

Note that while the Bissell study did offer data on the pharmacists' use of prescription medications, they did not inquire or theorize about the causal significance of this prescription drug use. Thus, the focus of their research remained at a more general level as they tried to explain why pharmacists succumb to substance abuse conditions.

The Bissell study also showed that the recovering pharmacists tended to progress into the latter stages of the substance abuse process (i.e., exhibiting visible signs of mental, physical, and emotional problems stemming from their substance use) before they entered treatment. It was not at all uncommon for the respondents to attempt suicide (21%), get arrested due to their use (51%), or drink and/or use drugs while at work (71%) prior to entering treatment. Furthermore, the respondents reported a mean length of drug using history of 16.7 years and a mean length of alcohol using history of 21.7 years. Despite the presence of the above mentioned warning signs, 58% of the respondents had never lost a pharmacy position or come to the attention of their state pharmacy board due to their substance abuse problem. The fact that these individuals were able to avoid official sanctioning or treatment for so long suggests that the pharmacy profession, their

employers, and especially their peers did not do a very good job of identifying and/or reporting the problem of drug use within their ranks.

A suspected lack of professional response to the problem of pharmacists' drug related deviance has been illustrated in several survey research efforts (Chi, 1983; Epstein, 1990 & 1991; Sheffield et al., 1992). For example, Chi (1983) reports that over one-third of the retail pharmacists she surveyed claimed that they knew a fellow pharmacist who was working under the influence of controlled substances. Of these pharmacists who were aware of an impaired colleague, less than one-half chose to report or act upon their knowledge of the wrongdoing.

A similar trend is illustrated by the data from a small scale interview study of female recovering pharmacists in Texas (Sheffield et al., 1992). These data show that the 23 interviewees had knowledge of 32 practicing pharmacists whom they claimed were actively abusing chemicals of some type. Surprisingly, none of these women had acted upon this knowledge. The significance of these data is amplified by the fact that all of these female interviewees were recovering from substance abuse, a status that tends to heighten the tendency to reach out to or intervene in the lives of those who suffer from drug related problems. It could well be that the drug tolerant cultural ethos within the pharmacy profession is so dominant that it overrides or nullifies the protective tendencies that are fostered in the recovery community.

In summary, the data from the above studies are quite disturbing. They suggest that practicing pharmacists routinely cover up or ignore the presence of pharmacists' illicit prescription drug use. While many are aware of their peer's deviant behavior and claim to disapprove of it, they do nothing about it. I submit that this lack of response potentially

serves to reinforce the individual's continued abusive behavior. This possibility will be explored in the present study.

The suggestion that pharmacists experience different substance use situations than other health care professionals is offered support by a study conducted by Gallegos et al. (1988). These researchers surveyed all of the health care professionals that were referred to Georgia's state-sponsored impaired professional program for assessment between 1975 and 1987. Their analysis included data on 1,352 doctors, 303 nurses, 129 dentists, and 127 pharmacists. The data show that, when compared to other health care professionals, the pharmacists had the highest rate of poly-drug use.<sup>3</sup> More importantly, much like the Normack study (Normack et al., 1985a) of nonrecovering pharmacists, this recovering pharmacist group (in the Gallegos study) consistently had the highest use rates of prescription medications such as narcotics, stimulants, and hypnotics. While many of the pharmacists also claimed to be using street drugs or alcohol, they engaged in disproportionate amounts of prescription medication use when compared to the groups of chemically dependent nurses, doctors, and dentists. These data again suggest that there is something special about pharmacists that leads them to a higher incidence of prescription drug use. It seems unreasonable to suggest that these disparities can be attributable to pharmacists' increased levels of access to such drugs.

One of the reoccurring themes of the research on substance abuse among practicing pharmacists (Bissell et al., 1989; Gallegos et al., 1988; McAuliffe et al., 1987; Normack et al., 1985a; Sheffield et al., 1992) is the lack of a well-rounded educational exposure of the respondents to the harms and manifestations of chemical dependency. For example, while the respondents in the Bissell study were clearly aware of the toxic effects of drugs and alcohol and other "physical" components of chemical dependency, the

authors report that their education was limited in other areas. This trend is apparent in the following statement:

What appeared to be lacking was attention to the human side--the process by which a person, in spite of an intellectual appreciation of the dangers, is led to experiment, then to rationalize continued use, then deny what is happening. Several believed that their superior store of information about drugs and familiarity with them would somehow magically provide protection or that if any trouble began it would be recognized and promptly handled. (Bissell et al., 1989, 22)

Taking this thought a step further, Gallegos et al. observe that

little attention has been dedicated to the occupational risk for the development of chemical dependence during the process of formal education in professional schools. This appears to be in part related to the limited fund of knowledge about the problem and in part to a kind of "global denial" that exists. (Gallegos et al., 1988, 195)

The above research on controlled substance use among practicing pharmacists offers considerable insight into pharmacists' substance use behaviors. However, one must note that all of these studies draw heavily on a medical model orientation to the problem and largely ignore possible social or environmental influences that might have affected the pharmacists' behaviors. Only in the case of educational experience do any of the researchers address the issue of substance abuse using factors that are unrelated to the individual actor. For example, when confronted with the differences in drug use that were noted between pharmacists and other health professionals, Gallegos et al. (1988) sidestep potential sociologically based explanations. In fact, there is no mention of the possible association between professional or occupational socialization and pharmacists' substance of abuse. As such, while this body of research furthers our understanding of the phenomenon, it presents only a partial picture of the dynamics of pharmacists' drug use behaviors.

There is considerable research that focuses on the use of controlled substances by pharmacists in training (i.e., pharmacy students) <sup>4</sup> This literature is of particular interest to the present study since it offers insight into pharmacists' drug use behavior during their earliest years of professional training and ethical development. Experiences during these years would be expected to have a long lasting effect on the individual's personal and professional outlook.

The above mentioned McAuliffe et al. (1987) study also included a sample of 278 pharmacy students. The researchers found that the pharmacy students engaged in significant amounts of controlled substance use. They report that 62% of the pharmacy students admitted some use of controlled substances, 18% doing so at least once a month and 23% doing so more than once a month.

McAuliffe et al. (1987) break down their drug use data into several use frequency and motivational categories. Of particular interest to the present study are the findings that show the students' recent and lifetime use of prescription medications.<sup>5</sup> These data show that 33% of the students report at least one lifetime prescription drug use episode, 10% report using once a month, and 8% report using more than once a month.

In comparing use data from the pharmacy students group to that of the practicing pharmacist group, McAuliffe et al. (1987) found differences in the reasons why the individuals were using drugs. Specifically, they found that the pharmacy students tended to use more drugs than practicing pharmacists. However, students did so more often for recreational, not self-medication reasons.<sup>6</sup> As pharmacists move from pharmacy school into the practice of pharmacy, it appears that recreational drug use tapers off significantly but their self-medication practices stay the same or increase. On the surface, this shift in the use and motivations seems encouraging. That is, the proportion of drug using



pharmacists clearly decreases. This trend might be construed as evidence of decreased usage resulting from positive professional development or an increased respect for the medications.

Note, however, that these data showing decreased usage and a motivational shift in drug use (i.e., from recreational to therapeutic self-medication) can also be interpreted to suggest that pharmacists come to rationalize the use of drugs in such a way that it becomes defined as self-medication, not deviant drug use. This is an important distinction and speaks directly to one of the central foci of the present project. We can expect that individuals' drug use will taper off some as they age (i.e., the data show that pharmacy students are younger than the practicing pharmacists and that use was negatively associated with age). However, if they come to use their professional status and expertise as a form of license for their continued and often progressive illicit self-medication practices, it can be argued that their drug use/abuse is exacerbated by their positions as pharmacists.

Intrigued by the motivational aspect of health professionals' drug use, McAuliffe et al (1984) conducted several case studies with recovering health care professionals who had histories of recreational opiate addictions. Three of the six case studies involved recovering pharmacists. McAuliffe et al found that each of these recovering health care professionals began their recreational drug use before or during college. The onset of their experimental recreational drug use (usually concentrated on street drugs such as marijuana and cocaine) was closely linked to the "hippy" subculture of the 1960s and 1970s. In each case, a fascination with drug induced euphoria led to the experimentation and then increased usage of opiates. In most cases, the individuals obtained their drugs from work and avoided black market sources. McAuliffe et al. attribute the emergence of recreational

drug abuse among health care professionals to changing social definitions of drug use. In short, he sees more permissive attitudes toward drug experimentation and "controlled" use as the chief contributing factor to this type of drug use. He concludes that

drug use by health professionals was generally an unfortunate side effect of self-treatment, not the result of a conscious deviation from norms concerning recreational drug use. But as a consequence of the radical changes in middle-class attitudes toward drug abuse that occurred during the mid-1960s, the health professionals described here did not explain their drug use as a response to pain, fatigue, or stress, but as a result of curiosity about how the drug's effects might make them feel. (McAuliffe et al., 1984, 16)

McAuliffe et al. (1984) conclude that these individuals' status as health care professionals also contributed to their recreationally based opiate abuse situations. While their use may not have been therapeutically driven, these individuals still used their formal training to facilitate their use behaviors and temper their inhibitions. McAuliffe et al. observe that

they were already highly knowledgeable about the possible adverse effects of drugs . . . [They] had extensive prior drug use experience, which they did not define as harmful overall. Rather than deterring the subjects, this prior experience and professional knowledge seemed to help them rationalize their use by discounting the risks (they understand drugs, have been able to handle their use, and would be too smart to let their use get out of hand), and by focusing on physiological dependence . . . Only in retrospect, it seems, did they recognize the importance of the insidious psychological (conditioning) dimension of addiction and the subtle symptoms of a gradually increased addiction. (McAuliffe et al., 1984, 17-18)

These McAuliffe et al. (1984) data on recreational opiate abuse illustrate an important point. They suggest that pharmacists' recreational drug use, much like their therapeutic self-medication, can be tied directly to the profession-specific stock of knowledge of the individual. This type of socially-derived drug use facilitator will be explored in depth in the present study.

Several other scholars (Hankes & Bissell, 1992; Spencer, 1994) have suggested that health care professionals can use their training to dupe themselves into believing that they are above issues such as illicit prescription drug use and drug abuse. For example, Hankes and Bissell state that

some have proposed the existence of "malignant" denial in medical professionals. Doctors often develop an attitude of omnipotence in the face of frustrations surrounding their true limitations. This omnipotence may intensify the whole denial process. The "M.D-ity syndrome" follows: it says that the possession of information is protective (omniscience), and whatever happens, I myself have the skill and capacity to get the information, overcome the obstacle, and solve the problem (omnipotent). In other words, doctors declare, "It won't happen to me, and even if by some quirk of fate it does, I'll be able to handle it!" They may also emphasize the socioeconomic differences between themselves and other alcoholic/addicts and the fact that their own drugs are legal. (Hankes & Bissell, 1992, 899)

Nowhere among the health professions is the potential for drug related "omnipotence" or "omniscience" more real than among pharmacists. Pharmacists are the "drug gurus" who spend the bulk of their adult lives reading about, talking about, handling, and dispensing prescription medications. This level of familiarity and expertise can lure the individual into a mind set that excuses, or even encourages self-medication or even recreational drug use. The presence of pharmacists' permissive self-medication attitudes and practices lend credence to the suggestion that the onset and progression of their illicit prescription drug use behaviors can and do have social origins. Moreover, the McAuliffe et al. (1987) findings tie these shifting motivations for pharmacists' drug use to the course of their pharmacy careers.

Normack et al. (1985b) conducted a study on substance use among the University of North Carolina's pharmacy students (n=391), only to find further widespread evidence of the same problem. These researchers found that substantial percentages of the pharmacists-in-training claimed that drug abuse<sup>7</sup> (37%) was a problem among their fellow

students. When asked if they were aware of one or more fellow students that they thought had a drug abuse problem, sizable percentages of the third, fourth, and fifth year pharmacy students answered affirmatively (39%, 13%, and 37% respectively). These numbers are quite similar to the figure of 36% reported by Miller et al. (1990) and 46% reported by Szeinbach & Benjamin (1990).

Several studies have been conducted that compare the use of controlled substances among pharmacy student to that of other students from other health care majors (Baptista et al., 1994, Coleman et al., 1997). Coleman et al. (1997) surveyed substance abuse among the University of Arkansas' health care students. This study included students from pharmacy, nursing, medical, and a generic health related professions category. Students were surveyed when they entered school in 1989 and then again in 1991. The data show that when broad definitions of substance use were employed (i.e., including prescription drugs, street drugs, and alcohol), pharmacists use was equal to or less than the other groups and their general substance usage numbers did not increase markedly over the first two years of their program of study. However, when attention was focused solely on prescription medications, pharmacists had the highest usage rates. In particular, the number of students involved and the frequency of the use of drugs such as amphetamines and oral analgesics increased markedly over the two year period.

Studies such as Kriegler et al. (1994) and Miller et al. (1990) compared pharmacy students' drug use behaviors to samples taken from the general college population. Both of these studies found that pharmacy students report lower drug and alcohol use than college students in general. However, the Kriegler study shows several interesting characteristics among the pharmacy students. Specifically, members of the pharmacy student group were found to exhibit more high-risk drug use behaviors than other college students. They

reported higher levels of perceived drug related peer pressure. They were more likely to begin drinking and using drugs while at college. They were more likely to attribute their substance use to stress. They reported higher levels of prescription drug use (e.g., sedatives and amphetamines). Each of these differences support the premise of the present study. That is, these Kriegler et al. (1994) data suggest that there are social factors associated with the demands and interactions of pharmacy school that foster prescription drug use.

In the Problem Statement chapter, I indicated that the present inquiry would examine the relationship between pharmacists' drug use education and their own personal drug use behavior. Namely, I suggest that, while pharmacists may be exposed to considerable course work and instruction dealing with the pharmacological aspects of drug use and addiction, they are exposed to very little training on the psychological aspects of drug use and addiction. This situation can lead to an ignorance or overconfidence about drug use that places them at higher risk of illicit prescription drug use or abuse. This assertion is directly grounded in the findings of past research. Several studies (Baldwin et al., 1991; Bissell et al., 1989; Kurzman, 1972; McAuliffe et al., 1987; McDuff et al., 1995; Miederhoff et al., 1977; Rascati & Richards, 1993) have examined issues related to pharmacy students' drug abuse education. The data suggest that pharmacy students are exposed to very little training on the psychological aspects of drug use and addiction. For example, pharmacy students in the McAuliffe et al. (1987) study report an average of 5.9 hours of drug abuse education. Moreover, there is evidence that this lack of education leads to conservative attitudes toward drug abuse. Armed with a wealth of pharmacological training and a deficiency of drug abuse training, pharmacists come to view drug abusers as weak individuals. For example, the Miederhoff et al. (1977) study

found that pharmacy students reported considerably more conservative attitudes toward drug abuse and drug abusers than did students in the physical sciences, biological sciences, social sciences, humanities, and social work. Moreover, the Miederhoff study shows that this conservatism increases over the course of the pharmacy student's college career. These data suggest that pharmacists develop an overconfident attitude toward drug use and abuse. That is, as they become more educated about the pharmacological aspects of drug use, their belief in the healing powers of drugs appears to cloud their perception of drug abuse. Specifically, as they become technically proficient with the drugs they become calloused and view the abuse of such drugs as a character flaw. I submit that this is a dangerous form of overconfidence or denial that can have profound effects on their potential to engage in and rationalize their own illicit prescription drug use and abuse.

Rascati and Richards (1993) present insight into the pharmacy student's attitudes toward drug and alcohol use among their peers. They attempted to assess pharmacy students' attitudes toward drug and alcohol use by having them complete a standardized instrument known as the Substance Abuse Attitude Survey.<sup>8</sup> They made an alteration to one of the survey questions in an attempt to focus specifically on pharmacists' views of prescription drug use among peers. Respondents were presented with the following statement: "A pharmacist who has been addicted to narcotics should not be able to practice pharmacy again" (Rascati & Richards, 1993, 57). The resulting analysis show that, on average, the students agreed with this statement and hence held conservative sentiments toward this statement.

In summary, several studies (Baldwin et al., 1990; Baptista et al., 1994; Giannetti et al., 1990; Kirk et al., 1989; Krieger et al., 1994; Kurzman, 1972; McAuliffe et al., 1991; McDuff et al., 1985; Miller et al., 1990; Miederhoff et al., 1978; Rascati & Richards,

1993; Szeinbach & Banahan, 1990, Tucker et al., 1988, White, 1985) have used varying methodologies and measurement indices to study issues related to pharmacy students' drug use attitudes and behaviors. There seems to be four underlying themes in these studies: 1) students and faculty agree that there is a substance abuse problem within their schools; 2) pharmacy students repeatedly point to a lack of formal instruction on the topic of chemical dependency and the psychological aspects of drug use; 3) the students exhibit conservative attitudes toward substance abuse and substance abusers; and 4) students feel unprepared or uncertain about how to react to substance abuse among their peers

Pharmacy journals have become very receptive to articles which focus on the topic of substance use and abuse among pharmacists. These journal articles can be classified into three categories: biographical sketches of recovering impaired pharmacists, policy oriented pieces which offer managerial suggestions for dealing with and detecting substance using pharmacists, and evaluation research which focuses on treatment alternatives.

While the biographical accounts of recovering substance abusing pharmacists are not based on systematic research efforts, they do offer a sort of "wake up call" for the pharmacy profession. These articles (Babbicke, 1991; Crawford, 1992; Reimenschneider, 1990; Starr, 1989a and 1989b; Tucker, 1985) recount chilling first hand accounts of how pharmacists were able to develop, perpetuate, and disguise their substance abuse problem from their families, coworkers, and employers. Collectively, they suggest that substance abuse can take on a number of forms and characteristics. These articles illustrate how the violators are able to use both the structure of their jobs and the individuals around them to perpetuate their substance abuse problem. Moreover, they tend to illustrate how job stress or occupational socialization issues contributed to the individual's substance abuse situation.

Several articles (Corsino et al , 1996, Hanks & Bissell, 1992; Haynes, 1988; Richardson, 1990; Simonsmeier & Fox, 1985, Sonnenstuhl, 1989, Smith & Starnes, 1988; Williams, 1993) focus on the special management issues raised by drug and alcohol impaired pharmacy practitioners. These discussions tend to summarize the existing evaluation research and/or utilize their own personal experiences to make proactive policy suggestions. The general consensus of these authors is that one needs to focus on early detection and treatment of substance abusing employees in an effort to "clean-up" the profession. Hanks and Bissell (1992) make a distinction between "primary" and "secondary" prevention. Primary prevention focuses on strategies aimed at proactively avoiding illicit prescription drug use and impairment situations. Secondary prevention is concerned with the reactive strategies of early identification and therapeutic intervention. The authors suggest that primary prevention is rarely accomplished in the case of pharmacists' drug use. I submit that this assertion is based in their adherence to a medical model orientation to substance abuse. By overlooking the possibility that social factors can and do contribute to pharmacists' drug use, one is forced to settle for secondary prevention strategies.

A third and final category of literature evaluates and describes existing treatment alternatives (Baldwin et al , 1988, 1991; Bunting & Talbott, 1985, Giannetti et al., 1990; McNees & Godwin, 1990; Penna & Williams, 1985; Sanchez, 1989, Sheffield, 1988; White, 1985). These articles strongly reflect the pharmacy profession's complete acceptance of the medical model. For example, Penna & Williams (1985) supply a handbook that is intended to serve as a model for those trying to plan and implement a recovery program for impaired pharmacists. This handbook clearly stresses a medical



model orientation. It offers a clear summary of the medical model literature and suggests practical applications for a treatment philosophy that replicates medical model ideas.

Upon reviewing the existing literature on pharmacists' use of controlled substances it is apparent that the literature presents a narrow view of the problem. There exists an unmistakable tendency toward an exclusively individual level focus that relies heavily on a individual or personal interpretation of pharmacists' substance use. This revelation should not come as a surprise given the fact that the researchers and authors who are responsible for this literature base were predominantly members of the medical profession.

### Employee Deviance Literature

Considerable insight for the theoretical framework of the present study has been drawn from the existing literature on the various other forms of employee deviance. This literature can be grouped into three areas: employee theft literature on trust violations, literature on substance use and abuse in nonmedical work settings, and literature on substance use and abuse in the health care professions.

#### Literature on Trust Violations

As previously mentioned, the conceptual tenets of the present study are firmly grounded in the ideas that Cressey (1953 & 1976) expressed in his classic study of embezzlement. Several past research efforts have approached the issue of employee deviance from a similar theoretical perspective. For example, in studying what he called "blue collar theft" among workers at an electronics factory, Horning (1970) found evidence that employees constructed their own definitions of what did and did not constitute "real" theft within the organization. These definitions depended on the type of property involved. The respondents classified property into three categories: company

property, co-worker's personal property, and property of uncertain ownership (e.g., scrap). The misappropriation of personal property or company property was clearly defined as theft. However, a similar definition was not applied to property of uncertain ownership. Because there was no identifiable victim, the workers felt justified in taking the property. The origins of these definitions and techniques of trust violations were traced back to the normative culture of the work group. The worker was taught what was acceptable behavior and what was not by his/her peers. These behaviors often directly contradicted company policies (i.e., trust violations) but the workers most strongly adhered to the group norms, not company policy. There was clear evidence that these factory workers were using their occupationally derived knowledge and expertise to perpetrate and justify their deviant behavior.

Other researchers have considered the ways in which organizational culture and the nature of one's job can facilitate instances of trust violations. These include Geis (1967), Benson (1985), Hollinger (1991), Tatham (1974), Sieh (1987), Dalton (1959), Gouldner (1954), Ditton (1977), and Mars (1982). While each of these studies takes on a slightly different theoretical twist, and focuses on a different work setting, each illustrates how the normative definitions of the work group enable the employees to neutralize their violations of organizational trust.

The present study focuses principally on Cressey's original conceptualization of trust violations. Namely, pharmacists' illicit use of drugs will be conceived of as an instance of trust violation. I will emphasize how pharmacists use the definitions that they gain through their educational, occupational, and professional experiences as a pharmacist to facilitate their drug use behaviors. I will show that pharmacists view themselves as immune to the pitfalls of substance abuse. The discussion will center on how the well

intentioned behaviors of the hard working and dedicated pharmacist can and do give rise to their use and abuse of the very prescription medications that they are entrusted with dispensing.

### Literature on Substance Abuse in Nonmedical Work Settings

There is a great deal of research on the broad topic of substance use in the workplace. This literature can also help inform the present project. Numerous researchers have illustrated how the culture of a given organizational environment can contribute to workers' substance abuse behaviors. For example, Hollinger (1988) demonstrated how job dissatisfaction and organizational culture among retail, manufacturing, and hospital employees were related to on-the-job drug and alcohol use. Plant's (1979) study of drinking behaviors among brewery workers shows that the pro-drinking attitudes and pride in the fruits of one's labor (i.e., the alcoholic beverages that they produce) were linked to high incidence of alcoholism. Rix (1981) and Molloy (1988) have demonstrated how the combination of heavily masculine occupational culture and limited social contacts among seaman and fisherman contribute to heightened heavy drinking and drugging. Several studies (Eichler et al., 1988, Licht, 1983, Mannello & Seaman, 1979) have linked the autonomy and stress of railroad work to drinking and drug use. Sonnenstuhl (1996) has shown how high stress and a pro-drinking subculture within New York tunnel workers called "sandhogs" played an integral role in the onset and progression of abuse among neophyte employees. Similar job-related drinking socialization processes have been identified among construction workers (Staudenmeier, 1985, Clawson, 1989). In short, reviews of the existing research and theory on substance use in the workplace identify a wide array of social factors that can be linked to employee's use of controlled substances (Fillmore &

Caetano, 1982; Hollinger, 1988, Staudenmeier, 1989, Trice & Sonnenstuhl, 1988, Trice & Roman, 1978).

In their classic analysis of substance abuse in the work place, Trice and Roman (1978) suggest that there are substance use "risk factors" inherent in many occupational environments. These risk factors will take on different forms in different work environments but share a common theme. Namely, they refer specifically to structural conditions associated with the nature of the work tasks or the work environment that facilitate employees' substance use at or away from work. These risk factors are commonly grouped into the following categories: general unstructured work environment, heightened levels of work related stress, and an absence of social controls. Numerous examples of each of these general categories of risk factors can be found in pharmacy work. Given the repetitive nature of filling prescriptions, pharmacists often comment on the structured and seemingly mindless nature of pharmacy work. Existing research (see Wolfgang & Korek, 1986 for a general overview) identifies the high stress levels of experienced by pharmacists. Finally, the unsupervised and limited social control constraints experienced by pharmacists are evident in their professional status and autonomous working conditions. These are but a few examples of the ways in which the risk factors outlined by Trice and Roman (1979) manifest themselves in the work of pharmacists.

#### Literature on Substance Use and Abuse in Health Care Professions

Not surprisingly, pharmacy is not the only health care profession to have attention focused on the incidence of substance use and abuse among its members. Over the past several decades, scholars have inquired into the nature and extent of substance abuse in each of the health care professions

For example, there is considerable literature that focuses on the issue of substance use and abuse among nurses. In 1984, the American Nurses Association (ANA) released a document stating that 8-10% of the 1.7 million practicing nurses in this country are dependent on drugs or alcohol (ANA, 1984). This study was followed by the Michigan Nurses Association's (MNA, 1986) estimates that one in every seven nurses will abuse drugs during his or her career.

There also have been several studies done on samples of nurses who were recovering from substance abuse (Bissell, 1981; Bogardus, 1987; Green, 1989; Hutchinson, 1986; Poplar and Lyle, 1969; Shaffer, 1987; Smith, 1989; Sullivan, 1987). While these studies are principally descriptive in nature, they present evidence that links the occupational culture of nursing to the recovering nurses' past substance use behaviors. This collection of research illustrates that nurses tend to use drugs for self-medication purposes, that nurses are often aware and cover up for the substance use behaviors of fellow nurses, and that the high stress/high drug access nature of the job feeds the progressive substance use.

My own research on drug use among nurses (Dabney, 1995a, 1995b) identifies numerous social factors associated with nurses drug use. In interviewing 25 nurses from various critical care settings, I found that on-the-job therapeutic drug use (i.e., self-medication) was common and accepted within the nursing work groups. The data show a multitude of personal, eyewitness, and hearsay accounts wherein nurses used nonnarcotic, prescription drugs such as Valium, Darvocet (nonnarcotic analgesic), and various Codeine-based medications. These behaviors were excused on the basis that they were medicinal in nature (i.e., helped the nurse perform his/her work duties) and involved what were perceived as less threatening/addictive nonnarcotic prescription medications.<sup>9</sup> It

was apparent that occasional therapeutic drug use was condoned and even encouraged at times within the nursing culture. Note that there are other studies that link organizational norms to nurses' drug use (Hood & Duphorne, 1995; Moodley-Kunnie, 1988).

The above studies on substance use among nurses identify a number of ways in which being a nurse contributes to an individual's drug use. While there have been no efforts to tie nurses' drug use to potential educational and professional level social factors, there is considerable evidence that links the onset, progression, and maintenance of nurses' substance use to the work group interactions that they encounter over the course of their careers.

Considerable research has also addressed the issue of substance use and abuse among doctors. The most widely cited studies include Carlson et al. (1994), Hughes et al. (1990), and McAuliffe et al. (1986). Much like the existing studies on pharmacists and nurses, these studies conclude that significant numbers of doctors regularly use significant amounts of prescription medications. Again, the trend among doctors seems to be therapeutic self-medication that leads to progressive drug abuse. Various occupational factors are linked to doctors' drug use. These include supreme autonomy, a lack of accountability, high access, high stress, and peer group approval. Moreover, numerous characteristics associated with the profession of medicine are attributed to doctors' drug use. These include a socialized sense of invincibility, a proscribed faith in the healing powers of medicines, and weak social control mechanisms within the profession.

The existing research on substance use behaviors and attitudes among medical students (Baldwin et al., 1991; Conrad et al., 1988; Clark et al., 1987; Ewan & Whaite, 1983; Hughes et al., 1991; McAuliffe et al., 1984; Varga & Buris, 1994) identifies several educationally-based social factors that contribute to medical students' college and post

college substance use. These include limited levels of substance abuse education, peer pressure to drink and use drugs to self-medicate or as a study aid, the fostering of a so-called "better living through chemistry" mind set, and the development of an elitist and omnipotent self-concept.

Over time, researchers have come to investigate the incidence of substance use in most of the health care professions. For example, there is research on substance use among dentists (Balevi et al., 1996; Doherty & Bennett, 1991; Oberg, 1988; Peterson & Avery, 1988), psychologists (Skorina et al., 1990; Thorenson et al., 1989), and anesthesiologists (Borg, 1997; Farley & Talbott, 1983; Gallegos et al., 1986; Pelton & Ikeda, 1991). While there is considerable variation in the form and content of these research efforts, each offers evidence that links various educational, organizational, and professional factors within the profession to the onset and progression of substance use and abuse among its membership.

My review of the existing literature on substance use among pharmacists and other health care professionals has identified numerous instances wherein evidence supports the premise that social factors can and do facilitate profession-specific substance use. This evidence has been gleaned from studies that invariably adopt a medical model orientation to substance use, hence, the identification and analysis of these social influences have never been a central concern to the researchers. In most cases, these social factors have been treated as extraneous results. There is, however, a wealth of sociologically-based research on the topic of substance use in the work place. This research is explicitly dedicated to investigating the ways in which the social factors associated with a given occupational or professional environment influence the incidence of substance use.

The present study draws upon both of these literatures. I have used the literature on substance use in the work place as a point of conceptual departure, maintaining that organizational cultures can and do influence the substance use behaviors within a given work environment. Next, I have reviewed the literature on substance use among pharmacists and other health professionals in an effort to identify aspects of these organizational cultures have been empirically linked to members' substance use. However, since a sociologically-based focus is new to the study of substance use among pharmacists it is necessary to review other literatures that speak to the dynamics of being and becoming a pharmacist. This literature will be organized into three sections: educational socialization, work culture, and professional socialization.

#### Literature on Educational Socialization

The past research on substance use among pharmacy students has identified several ways in which the pharmacy school experience contributes to an individual's substance use. For example, researchers have identified factors such as a lack of substance abuse education (Baldwin et al., 1991; Bissell et al., 1988; Kurzman, 1972; McAuliffe et al., 1987; McDuff et al., 1995; Miederhoff et al., 1977), the existence of permissive student attitudes toward recreational drug and alcohol use (Baldwin et al., 1990; McAuliffe et al., 1984; Miederhoff et al., 1977; Normack et al., 1985b), evidence of "instrumental" drug use to facilitate studying (McAuliffe et al., 1984), and a new found access to intriguing prescription medications (Bissell et al., 1988; Hanks & Bissell, 1992).

The above list represent but a few of the potential educationally-based social factors that can impact upon pharmacists' illicit prescription drug use. There are numerous



additional aspect of the typical pharmacy training experience that can potentially contribute to permissive drug related attitudes and behaviors.

The American Council on Pharmaceutical Education (ACPE) oversees the accreditation of all colleges and schools of pharmacy in the United States. The ACPE attempts to develop general curricular guidelines that are intended to assure that, regardless of their chosen educational emphases and pedagogical techniques, all pharmacy schools will adhere to baseline standards of education and training. In a chapter outlining the societal role of the pharmacist, Manasse (1977) states that, in pursuit of this goal, "the ACPE stresses course content in three broad areas: general education, pre-clinical sciences, and professional studies and training" (Manasse, 1977, 237).

There exists considerable debate over the way that pharmacy educators interpret and implement accreditation guidelines. More specifically, scholars have questioned the quality and utility of contemporary pharmacy education (Buerki, 1984; Buerki & Vottero, 1991; Hepler & Strand, 1989; Johnson, 1983; Reinsmith, 1987; Smith et al., 1991). These criticisms tend to be centered on the claim that pharmacy curricula and instruction tend to sacrifice the goal of professional training in favor of the highly technical preclinical sciences. Buerki & Vottero (1991) maintain that this has led to a situation wherein many pharmacy students emerge from pharmacy school with a limited understanding of ethics and their professional prerogatives. Left without formal or well coordinated training on the human side of pharmacy practice and professional responsibility, pharmacy students adopt these issues or glean them from a collage of inconsistent and unorganized experience. This is not to suggest that pharmacy schools could somehow program pharmacy ethics and professional development into its students. Given their status as impressionable, free thinking beings, we can assume that even the most systematic and

structured educational experiences will produce different interpretations across pharmacy students. However, when issues of professional development and professional responsibility are compromised in favor of technical training in the area of preclinical sciences, there is a potential for negative profession-wide consequences. Beginning pharmacists are left to self-regulate and self-define their own professional responsibilities and professional roles. When applied to issues of drug use, this definition process can result in permissive attitudes toward self-medication, relaxed prescribing practices, or a lack of respect for the medications. Any one or more of these manifestations can lead to illicit prescription drug use.

Formal training and course work are not the only parts of the pharmacy school experience that help shape an individual's professional identity. There is also a strong cultural aspect associated with the pharmacy school experience. That is, individuals spend a significant amount of their lives engaging in informal interaction with faculty and other pharmacy students. These interactions impact upon the self-concept of the neophyte pharmacist. Unfortunately, the nature and extent of the informal socialization process in pharmacy school has not been the focus of empirical study. However, numerous researchers have documented the informal socialization process that individuals encounter in medical school (Becker et al., 1961; Bloom, 1973; Broadhead, 1983; Fox, 1989; Haas & Shaffir, 1987; Konner, 1987; Merton et al., 1957; Shapiro & Lowenstein, 1979). While these studies do not deal specifically with pharmacy education, they do offer the best possible parallel for the issue of informal socialization in a health care profession. Collectively, these studies present a comprehensive picture of the multitude of ways that informal socialization manifests itself and the ways in which such manifestations impact upon the self-concept of aspiring physicians. This body of research clearly demonstrates

that informal interactions contribute to a heightened self-esteem and pretentiousness among medical students. Medical students gradually come to view themselves as occupying a higher social status than the rest of society. This raised self-confidence that Hanks & Bissell (1992) refer to as "omnipotence," can lead to a sense of overconfidence toward the tools of one's trade. In the case of the physician, they often adopt what is commonly referred to as a "god complex" in which they think that they can cure any illness. This situation is often linked back to the early socialization process in medical school.

In the case of pharmacists, it seems realistic to suggest that this type of overconfidence might also be turned toward the use of prescription medications and hence result in self-medication practices. Given that pharmacy students are impressionable neophytes, these socialization functions can have a long lasting impact on their professional identity.

The research on the medical school experience also offers important insight into the ways that informal social control mechanisms are developed in medical school. Namely, there is evidence that members develop and impose strict behavioral expectations that all individuals must adhere to. Like all social control functions, individual deviation results in sanctions. Researchers such as Haas and Shaffir (1987) argue that informal interactions between new and more advanced medical students define what are socially desirable behaviors for medical practitioners. These informal group norms are tied to a "cloak of competence" that has its foundation in the social status associated with being a medical professional. In short, pretentiousness is a built in part of the group socialization process. Anyone who defies or deviates from this prescribed presentation of self is thought

to threaten the legitimacy of the entire group. In many cases, the individual faces ostracism from the group.

Perceptions of this type of severe, group imposed form of social control presents a situation in which an individual has a vested interest in disguising those behaviors that the group has defined as most deviant. In short, if the group views a certain behavior as a threat to the legitimacy of the group, the individual will go to great extents to keep these behaviors from the group. In the case of pharmacy, illicit prescription drug use represents a threat to the profession's "cloak of competence" and hence threatens its legitimacy. Given this situation, strict group norms and the interpretation of such norms may result in increased denial, cover-up, and deception on the part of the drug using pharmacist. As such, the progression of a pharmacist's drug use situation may be exacerbated by the fact that he/she fears the informal sanctions that will be imposed by the group and understanding such a lack of tolerance becomes important.

The nature and dynamics of pharmacy education can be an important source of a pharmacist's long term professional identity. The formal and informal socialization processes that occur during one's pharmacy education serve as the foundation for many future attitudes and practices. It is reasonable to suggest that this premise is applicable to the issue of illicit prescription drug use. Pharmacists are undoubtedly exposed to cultural interpretation of such behaviors that shape their perceptions and behaviors.

#### Literature on Pharmacy Work Culture

The normative culture of the setting in which a pharmacist practices can also have a significant impact upon their decisions to engage in deviant behaviors. Numerous

scholars have focused on the ways in which various issues such as occupational role strain, stress, and job satisfaction impact upon pharmacists' involvements in deviant behavior.

Denzin and Mettlin (1968) argue that pharmacy suffers from "incomplete professionalization."<sup>10</sup> The authors criticize pharmacy on two fronts. First they argue that the pharmacy profession has been unable to achieve exclusive control over the social object that defines their existence, namely drugs. While pharmacists are in charge of dispensing drugs, they are dependent on physicians to prescribe the medications and their employing organization (i.e., hospital, retail pharmacy) to supply them with the drugs and the potential client base. Second, Denzin and Mettlin (1968) argue that pharmacy has been unable to consistently recruit individuals into their ranks who share a commitment to the same professional goals. That is, pharmacy recruits large numbers of individuals who are driven by economic or business ideals as opposed to purely human service motives. According to Denzin and Mettlin, these shortcomings reduce pharmacy to a quasi-professional status.

The issues expressed by Denzin and Mettlin speak directly to the problem of role strain. These authors were principally criticizing pharmacy for its inability to pull together into a unified professional entity. The pharmacy profession's precarious dependence on both the prescribing practices of the medical profession and the bureaucratic support of the hospital or retail pharmacy store produces role confusion and role strain within its members. In short, a successful pharmacist must come to accept both health care and business skills and ideals in order to cope with their complex professional position.

Quinney (1963) analyzed the influence that occupational role strain has on pharmacists' involvements in deviant behavior. He hypothesized that role strain would produce conflict within the practicing pharmacist and increase the likelihood that the indi-

vidual would lash out against those entities that he/she saw as producing these strains. Quinney's analysis involved an assessment of the amount of perceived role strain among retail pharmacists. He found that occupational role confusion had a marked influence on prescription violations among retail pharmacists. He argues that the nature of retail pharmacy is such that it forces pharmacists to struggle between professional roles (which stress patient care) and business roles (which stress profits). Quinney found that those pharmacists who were more business oriented in their occupational role were more vulnerable to prescription violation than were the more professionally oriented pharmacists.

The late 1960s and early 1970s was marked by other inquiries into the relationship between role strain and the incidence of professional disillusionment or job dissatisfaction among pharmacists (Akers & Quinney, 1968, Shaw, 1971, Linn, 1973; Kronus, 1975). Each of these studies showed that pharmacists often do experience role strain and that heightened levels of perceived role strain can lead to problems for practicing pharmacists. Admittedly, these studies are now quite dated but these structural problems still remain in the profession. Outside of inquiries into job satisfaction issues, there has been very little empirical inquiry in this area since the mid-1970s. And while scholars (Buerki, 1984, Buerki & Vottero, 1993, Hepler & Strand, 1989) agree that there have been significant changes in the direction of pharmaceutical practice over the past twenty years, most all are quick to conclude that there remains considerable unresolved occupational role strain. The present study will inquire into the nature and extent of occupational role strain in an effort to ascertain if its presence has any effect on pharmacist's illicit prescription drug use.

Role strain is often targeted as a chief source of work related stress among pharmacists. However, this is not the only source of work related stress that the

pharmacist encounters. Wolfgang and Korek (1986) have linked stress inducing factors such as a lack of challenging work, under staffing, perceived job insecurity, pressure from overly demanding clients, and feelings of inadequate compensation to pharmacists' potential substance abuse. In short, these authors argue that work related stress can produce emotional, intellectual or physical problems that lead to self-medication and then possibly more self-destructive substance abuse.

Other scholars (Appelbaum, 1981; Numerof, 1983) have linked heightened levels of work related stress to the incidence of substance use, psychological problems, as well as physical problems across a number of health professions. These studies suggest that job stress and job dissatisfaction can lead to self-destructive coping strategies. Moreover, they point out that health professionals' increased knowledge and access to prescription medications place them at risk of turning to the tools of their trade to relieve or treat these stressful conditions.

#### Literature on Professional Socialization

Clearly, a pharmacist's professional socialization process begins in pharmacy school. Issues related to the ways in which this early professional socialization process has been linked to pharmacist's substance use have already been outlined in an earlier sections of this chapter. However, there is no available research that specifically explores the effects that the ongoing professional socialization process has on a pharmacist's drug-related rule-breakings. We can, however, draw inferences about this by examining the existing literature in the areas of professional socialization among pharmacists and other health care providers. Of particular interest to the present study are the ways in which perceived codes of conduct affect pharmacists' drug use behaviors. Specifically, part of the

present inquiry will attempt to assess the ways in which pharmacists internalize professional norms and how formal and informal self-regulation are related to drug use behaviors.

Studies of recovering substance abusing pharmacists (Bissell et al., 1989) suggest that pharmacists go to a great lengths to cover up their drug use behaviors from detection by others. The individuals interviewed emphasize how they feared informal sanctions from their peers in the way of professional ostracism. However, there was also significant emphasis placed on the fear of formal sanctions from their employers (i.e., termination) and regulatory agencies within the profession (i.e., actions against their license by the State Board of Pharmacy). In short, fear of perceived informal, negative sanction and formal regulatory response encourage the abuser to hide their substance use, thereby allowing it to intensify.

The salience of these perceived sanction threats has been questioned by some researchers. Data has repeatedly shown that, despite their disapproval and negative value judgments, pharmacists are very reluctant to report drug related wrongdoings among their peers. This fact can clearly be seen in the research on pharmacy students (Miller et al., 1990; Normack et al., 1985b; Szeinbach & Benjamin, 1990; Woodward et al., 1995) as well as practicing pharmacists (Chi, 1983; Epstein, 1990, 1991; Sheffield et al. 1992). For example, Woodward et al. (1995) presented pharmacists with a series of vignettes intended to assess their reactions to peers who drink alcohol. The results show that the pharmacists clearly disapproved of heavy drinking and viewed peers who did this as less attractive, un-professional, and un-trustworthy. However, there was very little evidence suggesting that the pharmacists would act upon their disapproval and formally report the heavy drinking behavior of their peers.



This noninvolvement tendency was supported in a study on retail pharmacists' reactions to theft and illegal substitution practices by their peers. Wertheimer & Manasse (1976) found work group norms to be tolerant of deviant behaviors such as the theft, use, or substitution of drugs by pharmacists. Based on their observations, these researchers conclude that "the deviant behavior exhibited by the violator pharmacist yielded no known rejection of those pharmacists by their peers in the population studied" (Wertheimer & Manasse, 1976, 232).

Similarly, studies of various forms of deviance within other health care professionals further illustrate that deviant medical professionals usually overestimate the likelihood that their peers will come forward and report the wrongdoings to others. For example, Rosenthal (1995) illustrates how doctors often cover up for obvious incompetence or malpractice of their peers. She attributes doctors' tendency to cover up or "turn the other cheek" to a combination of several factors. First, she points out that there exists a certain fraternal obligation between doctors. Faced with perceived misunderstandings and pressures from nonmedical regulators, the individual doctor is more likely to protect the back of his/her troubled peer instead of sending him/her to the proverbial "wolves." Second, she argues that doctors do not like to deal with the pressures associated with blowing the whistle on a suspected wrongdoing of a peer. In short, coming forward means getting involved in the investigation and inquest issues and doctors would rather avoid these time and stress laden confrontations.

Elliot Freidson (1970, 1975), a noted authority in the area of professional socialization, also speaks to this paradox of informal norms of conduct and fraternal allegiance among doctors. He argues that professional socialization emphasizes group support and group protection. He points out that these ideals make for problematic situations

when medical professionals are faced with deviant peers. It seems that medical professionals adopt an ignorance about the potential for deviant behaviors to exist among their ranks. When peers do stray from the primrose path, the imposition of informal sanctions become a facade—individuals are often not willing to transcend their fraternal allegiances in favor of informal social control. In some cases, the witness assumes that the problem will go away. Other times, the witness assumes that the deviant behaviors will come to the attention of some external entity that is better suited to exercise their formal position of authority.

The literature suggests that there exists a problematic paradox among pharmacists when it comes to the issue of substance use among its members. On one hand, the substance using pharmacist may tend to slip deeper into denial and progressively greater usage because they fear that their peers will ostracize them or turn them over to higher authorities if they become aware of their use. On the other hand, it appears that pharmacy peers are often already aware of the substance use but choose to do nothing about it. This situation results in progressive substance use that is fed from both the paranoia of the user and the avoidance of their peers. The present inquiry will attempt to determine if such a situation exists, and if so, how it impacts upon pharmacists' drug use behaviors.

### Summary

This chapter has included scholarly literature that is focused on a broad spectrum of topics. Moreover, this scholarship has been produced by individuals who come from diverse substantive and theoretical backgrounds. While there has been a significant amount of discussion and research specific to the topic of drug use among pharmacists, none of this research has been principally focused on the sociological origins of the problem. In-

stead, the past research has approached pharmacists' drug use from a medical model orientation, stressing the ways in which individual-level psychological or genetic factors contribute to the etiology of drug use behaviors. The present study represents a significant departure from medical model explanations of drug use in pharmacist and other special populations. In particular, it will consider the role that social factors associated with the educational, occupational, and professional experiences of the individual have on their drug use situations. Given this conceptual focus, it has been necessary to draw upon sociologically based literature from areas such as employee deviance, substance abuse in the work place, pharmacy education, pharmacy work culture, and pharmacy professionalization.

#### Notes

1. The researchers used a broad definition of drug use, stating that they were interested in "pharmacists recovering from alcohol and other drug addictions" (Bissell et al., 1989). As such, much like the above studies, they have not limited their analysis to pharmacists' use of the substances that they are responsible for dispensing.
2. This disproportionate percentage of alcohol addiction can be explained by the fact that the majority claimed to be cross-addicted to a alcohol and a number of other substances (21% claimed to be solely addicted to alcohol). This should not be surprising since all of the respondents were active members in some form of mutual support group (i.e., Alcoholics Anonymous, Narcotics Anonymous). These groups tend to socialize their recovering members into endorsing a very liberal definition of "addiction" which subsumes a broad range of substance use behaviors.
3. Poly-drug use refers to an individual's use of multiple forms of mind altering substances. This use may involve mixing substances during one use episode or using different substances during separate use episodes.
4. Invariably, these studies of pharmacy students employ functional definitions of drug use. That is, they are principally concerned with issues of impairment. This type of focus results in substance use measures that include all types of mind altering substances, not simply prescription medications. Nonetheless, most of the studies present their data in a way that allows for such a distinction to be identified.

5. While this definition does focus exclusively on drug use, thus excluding alcohol, most of their discussion focuses on a definition of drug use that includes marijuana. They term this use "recreational drug use." Moreover, the marijuana use numbers tend to account for the majority of the student overall drug use.
6. Under the heading of "self-treatment," these researchers focus specifically on the students' use of prescription medications. Included in this category are sedatives, stimulants, analgesics, tranquilizers, and opiates. This definition closely parallels the definition of prescription drug use used in the present study. The only difference is that these researchers did not stipulate that the use be done without a prescription. The data show that 57% of the pharmacy student group had engaged in recreational drug use and 33% had engaged in self-medication. In the practicing pharmacist group the recreational and self-medication use numbers were both reported at 29%.
7. The researchers offered the students a definition of the substance abuse concept which read as follows: "abuse exists when any normal function, including work, eating, socializing, sexual relations, sleep, etc. becomes dependent on alcohol or drugs.
8. The Substance Abuse Attitude Survey is a Likert-type survey instrument that was designed to measure an individual's views of drug and alcohol use. The instrument contains 43 statements coded in a strongly agree/strongly disagree format. The instrument allows for an analysis of five factors associated with substance abuse attitudes: permissiveness, views of treatment interventions, stereotypes of users, treatment optimism, and moralism.
9. The nurses made a clear distinction between the use of narcotic vs. nonnarcotic medications. Narcotic medications were seen as a threat to patient care and a potential source of addiction. Conversely, nonnarcotic prescription medications were viewed as a source of therapeutic, nonthreatening pain relief, and hence provide work enhancement.
10. Denzin & Mettlin identify numerous qualities that are necessary conditions to achieve a complete professional status. These include: developing and maintaining specialized training, providing a skilled service with a fee attached, development of a code of ethics, engaging in formalized recruitment, establishing formal organizations and institution to preserve and perpetuate the occupation, self-governance, and achieving and maintaining exclusive control over the social object which defines the profession. The authors refer to pharmacy as a quasi-profession since it has been unable to actively recruit individuals who are committed to the professional goals and they have been unable to achieve control over their social object--drugs.

## CHAPTER IV RESEARCH METHODOLOGY

This study employs a multi-method research plan. Three separate data sources have been used to achieve a comprehensive inquiry into pharmacists' illicit prescription drug use behaviors. These data sources include 1) in-depth interviews with pharmacists who were recovering from illicit prescription drug use behaviors; 2) incident reports detailing officially discovered cases of pharmacist's drug related wrongdoings in the retail pharmacy environment, and 3) a self-administered, anonymous survey of practicing pharmacists. The following chapter outlines the details of the research plan, from data collection to data analysis.

### The Research Plan

The origins of this research project can be traced back to 1993. Long interested in the phenomenon of drug use among health care professionals, I began to read the available literature on the subject. My preliminary review of the literature led me to conclude that there had yet to be any significant inquiry into the sociology of illicit prescription drug use among pharmacists. From here, I set out to develop a methodological plan that would allow me to produce an etiologically-based understanding of the topic.

The foundation of my research plan is built around an in-depth interview component. The strategy was to locate pharmacists who had extensive personal experiences with drug use and engage them in a conversation that detailed the onset and

progression of their drug use experiences. The use of a personal (face-to-face) interviewing strategy was particularly well suited for the present project. Berg (1998) argues that face-to-face interviews are an especially effective tool for constructing a foundational understanding about sensitive and complex research topics. The Problem Statement and Literature Review chapters have already demonstrated that the onset and progression of pharmacists' illicit prescription drug use behaviors is clearly a sensitive and complex research topic.

Furthermore, Berg (1998) states that interviewing affords the researcher numerous methodological benefits in both the collection and analysis of data. From a data collection standpoint, personal interviews afford the researcher greater latitude to explore different substantive avenues within a flexible conversational format, while probing for new conceptual leads. The face-to-face format of an interview allows for a level of rapport with one's research subjects that is unheard of in most other modes of inquiry. The physical presence of the researcher at the time of data collection allow for points of clarification to be made that would be missed in self-administered surveys or other data collection techniques. The researcher can also better identify and react to the verbal and nonverbal cues of the interviewee. Each of these issues are particularly germane to the present project. A pharmacist's disclosure of the details associated with their illicit prescription drug use behavior is a very private and sensitive topic. As such, I was in need of a minimally-threatening data collection strategy.

Berg (1998) notes that the conversational format of the interview also produces benefits for data analysis phase of research. Namely, interviews allow a researcher to engage in a constant comparative method (Glaser & Strauss, 1963). This standard qualitative method brings data collection and data analysis together into one ongoing

process. It allows the researcher to explore and flesh out conceptual leads across the course of numerous interviews, thus, gradually building a more complete interpretation of ideas. Given the nature of my conceptual framework, the ability to closely connect the data collection and data analysis became an important criteria in my decision to begin the data collection effort with an interview-based inquiry.

The face-to-face interview component of the research project serves as the inductive center of this study. This component will be first used to gather descriptive data and ideas about the nature and dynamics of pharmacists' illicit prescription drug use behaviors. The resulting insight was then to be used to construct the two other data collection instruments.

The first application of the interview data involved the formulation of an archival-based data collection effort of officially discovered deviants. I successfully solicited two major retail pharmacy chains for their permission to access all available loss prevention department documentation regarding cases involving pharmacists' drug-related wrongdoing. My goal was to use these incident report data to both support and complement the evidence and ideas that were generated by the earlier interview inquiry. To this end, the interview component was instrumental in the development of both the standardized data collection template and the proposed analysis plan.

Admittedly, the interview component of this project is open to criticisms that it is unrepresentative of the drug use attitudes and behaviors of the typical pharmacist. This initial component of the project was purposely designed to generate rich interpretive and experiential information on how social factors affected the drug use behaviors of a small but exclusive group of pharmacists who have substantial drug use histories. As such,

generalizability was compromised in favor of examining a rich data source that identifies important relationships within a special group of deviant individuals.

The archival-based loss prevention apprehension incident report component of the project is also open to criticisms and questions about the representativeness of the findings. Namely, the small, nonrandom sample and the utilization of apprehension data limit the ability to generalize from the data. However, generalizability is again of secondary importance to this archival-based data collection effort. These data are intended to offer descriptive data on pharmacists' drug use behaviors that will be used to supplement and support the findings from the interview component.

This is not to suggest that the present project is unappreciative of generalizable findings. I very much wanted to produce a comprehensive sociologically-based study of pharmacists' illicit prescription drug use behaviors that could be used to consider the nature of the problem within the larger pharmacy profession. In an effort to achieve this goal, I formulated plans for a mailed, self-administered, anonymous survey that was to be distributed to a large sample of typical practicing pharmacists. This third and much larger source of data queried a random sample of practicing pharmacists on the topic of illicit prescription drug use, and hence offered considerable potential for generalizability. Here again, the personal interview component served a critical role to every aspect of questionnaire development. The trends uncovered in the interview inquiry were intentionally operationalized within the questionnaire to allow for comparisons to be made between the two data sets. In particular, I wanted to be able to use quantitative techniques to expand upon and verify the findings uncovered in the interviewing component.

The use of a multi-method research plan is somewhat different from the strategies used in other studies. My inductively based research design differs from the often



employed multi-method approach wherein qualitative interview data will be used to add context to quantitative data. I submit that my methodology offers a more comprehensive assessment of pharmacists' illicit prescription drug use behaviors. The combination and coordination of both qualitative and generalizable quantitative data allow me to discussion that offers both depth and breadth to the understanding of the topic.

#### In-depth Interviews with Recovering Drug Using Pharmacists

The face-to-face interview component was intended to examine personal life-histories offered by a snowball sample (Berg, 1998) of pharmacists who were in recovery for their past prescription drug abuse. I began by developing a loosely structured interview guide (see Appendix A). The substance of the interviews were oriented toward retracing the individual's pharmacy career, paying particular attention to the intertwined dynamic of their personal drug use. Conceptually, the goal of this endeavor was to contextualize the individual's drug abuse within their complex life system. Drug use behaviors were not separated from the individual's personal or professional life. Instead, the pharmacist's drug use was conceived of as a form of behavior that co-exists and interacts with a myriad of other behaviors. I hoped that this conceptual approach would allow me to gain insight into the complex interaction patterns that contribute to, perpetuate, and exacerbate pharmacists' drug using activities.

A copy of the interview guide is presented in Appendix A. Referring to this appended information, one will notice that most of the interview topics are committed to exploring possible linkages between individuals' illicit prescription drug use and various social factors. Most notably, they inquire about the ways in which educational, occupational, and professional experiences influenced personal drug use.

### Participant Recruitment

Most every U.S. state has developed a recovery network for impaired pharmacists. While their organizational structure, funding sources, and other administrative aspects differ from state to state, each of these social assistance networks is committed to serving as a liaison between drug and/or alcohol using pharmacists and the governing social control and sanctioning bodies (e.g., state board of pharmacy, pharmacy employers, Drug Enforcement Administration--DEA) that oversee pharmacy practice. Key figures in these networks, as well as the recovering pharmacists that they work with, routinely congregate at various local, regional and national conferences. These venues were used as the central recruitment sources in the personal interview component of the present study.

The early months of 1993 were spent fostering relationships with key figures in the pharmacist recovery network. The details of the study were explained to each of these individuals and they were asked if they would be willing to assist in gaining access to pharmacists with prescription drug abuse histories. Every individual approached was quite receptive to both the study and the potential of assisting in its completion. Three of the more influential individuals in the recovery movement were chosen as primary respondent "recruiters."

The selection of respondents and subsequent data collection were carried out over four separate occasions. The first occasion involved my attendance at the 1993 annual conference of the American Pharmaceutical Association. The second involved my attendance of the University of Utah's week long seminar known as the School on Alcoholism and Other Drug Dependencies, held during June of 1994. The third occasion involved a 1995 two week long trip to several cities in Texas. The final occasion involved a 1995 two week long trip to several cities in the Pennsylvania/New Jersey/Delaware area.

Each of the above times and locations were chosen because it was known that 1) there would be significant numbers of recovering pharmacists present, 2) one or more of the above described recruiters would be present to assist me in locating potential interview participants.

My methodological strategy allowed me to gain access to large numbers of recovering pharmacists from around the country. I continued a "snowball" sampling strategy until I had successfully contacted and interviewed 50 pharmacists who were in recovery treatment programs for prescription drug use behaviors.

### Data Collection

Prior to departing for each of the above destinations, I contacted my recruiters and asked them to assist me in locating potential interview participants. They were instructed to contact pharmacists with prescription drug use histories and offer them the opportunity to participate in the study. The recruiters were asked to briefly describe the research project and indicate how the pharmacists could contact me with any questions about the project. When I was contacted by potential respondents, I answered any questions that they had and made arrangements to meet and interview them. None of the individuals who contacted me refused to participate in the project. Moreover, the recruiters reported that they had little difficulty getting people to initiate contact with me.

I personally conducted all 50 of the face-to-face interviews that are included in this analysis. These interviews were held in a variety of places. While most took place in hotel or dormitory rooms, others were conducted in public parks, cafeterias, the respondent's home, the respondent's place of employment, or meeting rooms. Regardless of the location, all of the conversations involved only myself and the volunteer respondent. Despite the odd assortment of locations used, we were always able to achieve a reasonable

level of privacy. At the start of each interview, the respondent was read an explanation/consent statement pursuant to UF-IRB approved protocols and asked for permission to tape record the conversation. All respondents willingly cooperated.

### Measurement

The interview guide contained in Appendix A offers an outline of the interview content. This interview guide is separated into thirteen "topical areas." These topical areas served to remind me of the various substantive issues that I wanted to work into the each interview conversation. However, note that the loose organization of this interview guide allowed for each interview to be reordered to accommodate the natural flow of the conversation. While I consciously sought opportunities to work each of the interview topics into the conversation, the respondent was granted considerable freedom in determining the direction and pace of the interview conversation. This resulted in interviews that ranged from one to three hours.

The interviews began with a query into each person's pharmacy background. Referring to Appendix A, Topic #1 was designed to inquire into the individual's work history. My first goal was to develop a time line documenting each individual's work experiences that could then be used as a reference point to organize the rest of the conversation.

Topic #2 on the interview guide was designed to probe into the formal pharmacy education of each respondent. Individuals were encouraged to describe the socialization process that they experienced while in pharmacy school. Attention was focused on the ways in which peer interactions as well as formal institutional interactions help shape student's lives. Again, this information is intended to serve a baseline function that was then referenced in subsequent parts of the conversation.

The next two topics on the interview guide (Topics #3 & #4 in Appendix A) focused on the issue of professional socialization. Details of the individual's early work experiences and continued pharmacy work were discussed in an effort to gain insight into the process by which a professional identity was nurtured.

Topic #5 (Appendix A) queried the individual about the concept of job satisfaction. This section of our discussion drew attention to their experiential and aspirational appraisals of their professional situation. Note that temporal cues were used to ground these appraisals within the various stages of their pharmacy career.

Referring to Appendix A, Topic #6 was intended as a transitional item moving into the individual's substance abuse history. Specifically, the individual was asked to describe his/her attitudes toward controlled substances. Here, I was interested in determining the individual's personal and professional views on drug use and abuse. This line of inquiry was particularly sensitive to the ways in which these views changed over the course of the individual's pharmacy career. Attention was focused on how pharmacy school, early work experiences, and later work experiences shaped the individual's personal attitudes about drugs.

Topic #7 from the interview guide (Appendix A) focused on the individual's substance use history. This section of the discussion was centered around a pencil and paper exercise in which the respondent was asked to draw a time line of his/her substance use history. I found that this exercise allowed me to contextualize significant substance related events within each individual's personal life and professional career. This technique facilitated exploration of potential contributing factors related to the person's substance abuse trajectory. Specifically, my probes directed the conversation to issues socially related to the individual's educational, occupational, and professional experiences.

The discussion of the behavioral components of their substance abuse history was supplemented by an inquiry into possible rationalization techniques that have been employed by each respondent (see Topic #8, Appendix A). Particular attention was given to the sources of the individual's rationalizations and the interactional patterns that facilitated their development and internalization. Every effort was made to determine the temporal and situational contexts in which these rationalizations were developed and imposed by the respondent.

Topic #9 (Appendix A) solicited input from the individual regarding the etiology of his/her substance abuse situation. The individual was asked to reference the pencil and paper drug use history time line and theorize about the ways in which significant life events impacted upon their substance abuse situation. Again, I directed the individual's attention to the ways in which various social factors were related to his/her drug use behavior.

The next three topics on the interview guide (Appendix A) addressed issues related to the individual's ongoing recovery from substance abuse. Topic #10 inquired into the details of their substance abuse treatment and after care. Topic #11 was concerned with the personal and social conditions associated with the individual's substance abuse after-care. Finally, Topic #12 focused on the individual's perceptions of various personal, professional, and societal reactions to the issue of substance abuse among pharmacists.

Upon completion of the interview conversation, each individual was asked to complete a one page demographic checklist. This checklist is attached as Topic #13 of the interview guide. Referring to Appendix A, the individual was asked to indicate his/her age, gender, race, marital status, educational background, pre-and-post-treatment levels of income, and aspects of his/her religious orientation.

Note that the above interview guide was pre-tested on several individuals. Two recovering pharmacists for the Florida area were interviewed and asked for feedback on the interview structure and its content. Moreover, one of the members of my Supervisory Committee conducted a pretest interview. None of these pretest interviews was included in the final sample of 50 interviews. Also note that two other interviews were excluded from the analysis because the individuals had only used alcohol in the past.

#### Data Organization and Analysis

Once all fifty of the interviews were completed, the tape recording of each one was transcribed verbatim. Next, a standard form of thematic content analysis was used to analyze the data. The coding of the transcribed interview data was done electronically using the Qualpro computer coding program. This involved computer-assisted sorting and resorting the data from general to more specific thematic categories. The mundane categories included but were not limited to the various topical areas contained in the above described interview guide. By sorting through these more general themes, I was able to search for and identify more specific themes in the data. Several phases of this sorting and coding process were conducted until I developed a comprehensive classification of the interview data. At this point, patterns were reported and direct quotations were readied for their inclusion in the forthcoming findings chapter.

#### Analysis of Loss Prevention Incident Reports

The second data collection effort involved an analysis of formal documents provided by the loss prevention departments of two major retail pharmacy chains. A standardized data collection template (Appendix B) was used to gather descriptive data

from the corporate documents associated with loss prevention investigations into the incidents of pharmacists' drug related wrongdoings.

The data from the loss prevention apprehension reports were used to develop a profile of pharmacists' officially documented illicit drug related behaviors within the retail pharmacy setting. Specifically, these data allow me to identify and summarize the offense characteristics, the offender characteristics, and the formal and informal responses associated with officially documented cases of pharmacists' illicit drug incidents.

### Sampling

Existing personal relationships with loss prevention administrators from two major chain drug store firms were used to gain access to each company's corporate loss prevention records. These companies were chosen principally chosen out of convenience. That is, the corporate officials were ready and willing to cooperate with my research efforts. However, note that convenience was not the only reason for approaching these two particular firms. Both firms are among the largest retail drug chains in the United States. This fact assured that each firm employed large numbers of pharmacists and would have significant experience with the problem of pharmacists' illicit prescription drug use. These firms were also approached because each had a comprehensive loss prevention record keeping system. As such, each firm had the ability to isolate drug related cases from all other nondrug investigations. They were also willing to offer the necessary staffing assistance to assist me in locating and interpreting the available documents.

### Data Collection

Since all of the loss prevention records that I was interested in gaining access to were kept on-site in the loss prevention department of each company's corporate headquarters, it was necessary for me to travel to each location to gather the data. Once at



the corporate headquarters, I had to develop some way to systematically record the documented information. A two-page data collection template (Appendix B) was developed to achieve this goal. Construction of this data template began with my referencing the interview component of the project. First, I considered what the corporate officials had told me and shown me about the documents that I would access. Next, I referenced my interview data to determined areas of substantive overlap between the interview and archival data sources. In constructing the data template, I intentionally included items that could be cross-referenced with the interview data. For example, I included items such as the individual's motivation for drug use, the types of drugs involved, the amounts of overall and daily drug use, and the demographics of the offender. The details of this data template will be reviewed below.

The archival loss prevention incident data collection was completed during the Summer of 1995. Upon arriving at corporate headquarters, I found that each firm had an indexing system which allowed administrators to readily identify and access individual case information. These indexing systems were used to identify only those incident reports containing cases of drug related behavior involving at least one licensed pharmacist. All incident reports from 1990 to 1995 were included in the study. This produced a sample of 89 cases.

### Measurement

Appendix B contains the standardized data collection template that was used to gather information from each incident report. Referring to Appendix B, one notices that this data collection template is divided into the following areas: incident information, substance information, and perpetrator demographics. The section entitled "incident information" focuses on the social response to the act(s) and individual(s) that came under

investigation from loss prevention administrators. The first five items, namely the date of report, location information, mode of detection, incident description, and length of investigation items focus on the details surrounding the loss prevention department's investigation of each incident. This information allowed me to determine the variety of behavioral patterns being used by the offending pharmacists.

The next four items on the data template (Appendix B) explored the potential involvements of various external formal social control agencies had in the case. These items addressed the nature and extent of any involvements on the part of law enforcement, State Board of Pharmacy, recovery network, or other external social control agencies. This information allowed me to indirectly gauge how severely the various corporate, local, state, and national social control agencies reacted to the social problem.

The last five items on the first page of the data template, namely, response of the accused, resulting sanction, restitution arrangements, present status of the case, and pending actions, focused on the various outcomes of the collective investigative actions. In short, these items were intended to provide me with a better understanding of the formal disposition of each case.

The first item on the second page of the data template (Appendix B) solicited an itemized account of any and all substances that were allegedly involved in each case. Here, the type, amount, and dollar value of each drug used was recorded. These data allow me to compare the details of the drug thefts and subsequent usage to those described by the interview participants.

The next several items are specific to those cases which involve some type of drug theft. The first of these items inquired into the mental intent of the perpetrator. If the substances involved were being removed from pharmacy stock, then it is important to

understand what the individual intended to do with them. Recognizing that this type of information is at times speculative, an effort was nonetheless be made to determine what each individual's intentions were (i.e., personal use versus sale). Furthermore, an attempt was made to determine the theft techniques as well as the total dollar amount of the stolen drugs. Note that the incident reports usually contained some form of documentation on each of these items.

The loss prevention incident reports were also utilized in an effort to determine the nature and extent of other individuals' involvement or knowledge about the documented drug related behavior. Group-supported deviance, as well as enabling behaviors on the part of the co-workers, friends and family members, are particularly interesting since they speak to the social component of these behaviors.

Most pharmacists who steal drugs from their place of employment do so for personal consumption. Over time, personal consumption patterns are known to increase and diversify. As such, a series of items on the data template (page 2 of Appendix B) sought to gather information about the pattern of drug use behaviors. This information was supplemented with any information regarding possible treatment that the individual had undergone. Anticipating the diverse details that can and do accompany a substance abuse situation, additional space was provided in this section to account for unforeseeable circumstances in the data. In many cases, this space came in useful as considerable comments had to be recorded.

The final section of the incident report data template (page 2, Appendix B) was intended to gather demographic information on each of the individuals who were implicated in the drug related incident. Of particular interest was the individual's age,

gender, race, length of tenure, job description, performance evaluation, and their disciplinary record. These data were often not available and had to be left blank.

#### Analysis of Loss Prevention Incident Data

The data collection effort yielded information on 89 of pharmacists' drug related wrongdoing. The SPSS Data Entry II computer program was used to convert the handwritten data templates into an computer analyzable form. Next, SPSS/PC+ was used to generate descriptive statistics for each of the response item on the data template. The open ended items were subject to the same form of standard thematic content analysis plan that was used for the interview data. The results of these descriptive analyses will be presented in a forthcoming Findings chapter. The goal of the analysis was to produce a descriptive profile of the drug related behaviors that have come to the attention of, and been investigated by, the loss prevention officials from this particular group of chain drug stores during the 1990's. These data would then be used to supplement and support the data from the other components of the project.

#### Survey of Practicing Pharmacists

As mentioned above, the research plan called for the interview data from the recovering pharmacists to be supplemented and supported by survey data obtained from a sample of practicing pharmacists. This third data source would include both pharmacists with illicit drug histories and pharmacists with no previous involvements in such behaviors.

#### Sampling

Potential survey respondents were obtained via a random sampling strategy drawn from the membership list of the American Pharmaceutical Association (APhA). The APhA is a national professional society for pharmacists that offers membership to any licensed

pharmacist or pharmacy student. Note that this is the only professional society that represents all pharmacy practice settings. Its current membership exceeds 48,000. The APhA was asked to generate a random sample of roughly 2,000 pharmacists. I reasoned that this sample size would allow for stable statistical analysis.

The APhA membership information was used to impose the following sampling selection criteria. First, only members whose file showed that they were a licensed, practicing pharmacist were included. This allowed me to exclude nonpharmacists or members from another country. Second, the sample was restricted to individuals with one of the following job titles: staff pharmacist, director, owner, manager, or supervisor. This limited the sample to dispensing pharmacists and excluded technicians, educators, researchers, clinical pharmacists, residents or fellows, and various other APhA members whose job is not closely linked to the dispensing of medications. Finally, the APhA information on place of employment was used to ensure that no retired or nonpracticing members were included. Only those individuals who listed their "primary place of practice" as either a community and ambulatory or organized health care practice (i.e., hospital-type) setting were included. Mailing labels containing the name, title, and home address of 2,036 pharmacists were generated and sent directly to the researcher for the preparation of mailing materials.

#### Data Collection

Each potential respondent was mailed a packet via first class mail that contained four items. The first item was a four-page questionnaire. The questionnaire was constructed using a desktop publishing program (Ventura Publisher). This assured a professional appearance for the questionnaire. A photocopy of the questionnaire is presented as Appendix C. Second, each mailing packet included a postage paid, business

reply envelope. Third, a cover letter, signed by myself and Dr. Richard Hollinger was included. This one-page cover letter was reproduced on University of Florida, Department of Sociology letterhead. It offered a brief description of the project, participation instructions, and invited the recipient to participate in the survey. Finally, each mailing packet included a one-page cover letter signed by the co-coordinators of the APhA's pharmacy recovery program. This second cover letter, which was reproduced on APhA letterhead, assured the potential respondents of the confidentiality and importance of the project and once again encouraged them to participate.

The above mailing packet was sent out to all 2,036 practicing pharmacists in the sample through a single wave mail out. Eleven mailing packets were returned due to expired or bad addresses. This reduced the total number of potential respondents to 2,025. In all, 1,016 surveys were returned, yielding a response rate of 50.2%.

#### Survey Instrument

Appendix C details the self-administered, anonymous, mailed survey questionnaire that was used in this component of the data collection effort. The questions are principally focused on the details of each respondent's pharmacy career and their attitudes, understanding, and personal involvement related to illicit prescription drug use. The development of these survey items involved heavy referencing of the topical areas contained in the above described interview guide. Modeling the survey of practicing pharmacists after the in-depth interviews with recovering impaired pharmacists allowed me to compare the professional and personal lives of individuals who have drug histories with those who have no previous history of drug use.

The first seven survey items (questions #1-7, Appendix C) replicate the demographic checklist that each interview respondent was asked to complete (see Topic

#13, Appendix A) Specifically, these items gauge the respondent's age, gender, race, marital status, and religious beliefs.

Referring to Appendix C, questions #8-13 focus on the details of the respondent's work history. These items query the respondent on aspects of their present employment situation, the length of their licensed pharmacy career, the types of pharmacy practice that they have experience in, and their motivation for entering the profession.

Several survey items (questions #14, 18, and 19-24, Appendix C) focus on general aspects of the respondent's formal pharmacy education. Respondents were asked for information about their pharmacy credentials, the school that they attended, their year of graduation, their grade point average (GPA), and their age at graduation. Also, they were asked to specify their marital status, type of residence, and Greek fraternity affiliation while in pharmacy school. These largely demographic items allowed me to gain a better understanding of the individual's pharmacy training and provided educationally-based measures for the subsequent analysis.

Recall that past research (Baldwin et al., 1991; Bissell et al., 1989) has shown that, in general, pharmacists are poorly trained in the behavioral aspects of drug abuse education. This ignorance has been linked to the incidence of drug use among pharmacists. As such, two survey items, namely numbers 15 and 16, measure the individual's exposure to formal education on the psychological aspects of chemical dependency. The nature of this formal training/drug use relationship will be explored in the subsequent analysis.

As a follow-up to the above formal training items, question #17 (Appendix C) asks the respondents to indicate what educational and informational resources related to the problem of drug abuse among pharmacists have been made available to them by their

present employer. This occupationally-based training item offers further insight into the individual's level of knowledge and resource bases specific to the problem of drug abuse.

Survey item #25 (Appendix C) addresses the issue of one's faith in the therapeutic potentials of pharmaceutical drugs and medications. This item is intended to explore the individual's disposition toward the therapeutic use of prescription medications and whether these sentiments have changed over the course of their careers. In other words, this set of items provides indirect measure of how much confidence the individual places in the tools of his/her profession. This information can potentially offer insight into whether or not levels of ideological commitment are related to one's potential to engage in drug related improprieties.

Previous research has explored the effects that aspects of occupational roles and job environment have on various forms of deviance among pharmacists. For example, Quinney (1963) argued that the structure of pharmacy work fosters a tension between the occupational role as a businessperson and a health care provider and that these tensions can contribute to their subsequent involvement in job related deviance. Referring to Appendix C, the issue of perceived occupational role conflict is the focus of questions #26 and #27.

The next series of questions focus on various ethical or professional socialization issues that may act as contributing factors to pharmacist's problematic drug use. First, questions #28 and #29 (Appendix C) poll the respondent on their views and exposure to the practice of relaxed drug dispensing. It was expected that exposure to relaxed dispensing practices would yield more self-medication

The second professional socialization item (item #30, Appendix C) asked the individual about their attitudes toward the recreational use of prescription medications.



This item was intended as a proxy measure of the individual's likelihood for engaging in the recreational use of prescription drugs.

The next professional socialization line of questioning (questions #31 and #32) inquires into the individual's attitudes and exposures to the practice of self-medication. Past research (McAuliffe et al., 1987, Normack, 1985b) has linked pharmacists' self-medication practices and attitudes to the incidence of substance abuse in the profession. Moreover, the subsequent findings chapter will illustrate that this was identified as an important theme among the recovering pharmacists who were interviewed in the present study. As such, it was important to inquire further into this issue among a sample of practicing pharmacists.

One last ethics-based item (question #33, Appendix C) asks the respondent to estimate how well prepared they think they are to deal with a drug abusing colleague. This is a standard item included in pharmacy ethics texts (Buerki & Vottero, 1993). In this case, it was principally intended to offer an abstract compliment to the formal training items listed above.

Several items attempt to determine individual's exposure to and response to other drug using pharmacists (Questions #34 - #36, Appendix C). These learning based items can offer a proxy measure of the individual's acceptance of drug using peers. It is expected that relaxed attitudes toward drug using peers will be related to personal drug use behaviors.

At this point, the substance of the survey shifts to the individual's personal drug use experiences. Question #37 (Appendix C) is a forthright attempt to determine if the individual has ever thought that they were abusing any prescription or nonprescription drugs.

In question #38 (Appendix C), the respondent is presented a list of twelve drug types/classes and asked to indicate if and when they first used each. This item offers important insight into when pharmacists began using the various substances. Moreover, the career-based response choices (pre-college, during college, post-college) offer an indication of where the use began in reference to their pharmacy training and practice.

The next item (Question #39) queries the individual about his/her use of the same twelve different types/classes of prescription and nonprescription (e.g., marijuana/hashish, cocaine) drugs. The nonprescription controlled substance items are included in an effort to determine if there is any evidence of pharmacists making a normative distinction between the use of prescription versus nonprescription controlled substances. The responses to the prescription drug items serve as the foundation for the dependent variable in the pending analysis.

The final survey item (question #40, Appendix C) focuses on how pharmacists actually gain access to the drugs that they use. Specifically, respondents are asked to indicate the ways in which they obtained each of the twelve drug types/classes that they may have used in the past.

Only a small part of the survey instrument focuses directly on issues related to personal drug use. This is done in anticipation of the fact that the majority of the responding pharmacists will report very few illicit prescription drug use episodes in their past. Note, however, that considerable attention is focused on the respondent's perceptions of pharmacy ethics and drug use within the profession. This focus seeks to explore emergent personal or structural social controls that may have contributed to their abstinence from drug use. These survey data allow for statistical inquiry into the ways in

which various social factors influence the onset and progression of pharmacists' illicit prescription drug use.

#### Data Analysis

The data from the survey component of the study were coded, cleaned, and analyzed with the assistance of the SPSS/PC+ statistical analysis computer program. Descriptive statistics were run for all survey items. Next, the analysis focused on the construction of an conceptual model that could be used to predict illicit prescription drug use among pharmacists. Here, thirteen variables were identified for bivariate and multivariate analyses. Frequency of illicit prescription drug use was chosen as the dependent variable. The independent variables can be classified into four categories: educational variables, occupational variables, professional variables, and control variables.

The bivariate relationships between the drug use outcome measure and each of the independent variables were assessed by using cross-tabulations and accompanying measures of association. The results of these procedures will be presented in table form.

The results of the bivariate analysis were used to construct a multivariate analysis plan that would allow me to predict illicit prescription drug use among pharmacists. This was achieved using ordinary least squares (OLS) regression (Achen, 1990) and a ratio form of logistic regression (Fienberg, 1977). Namely, the various prescription drug use outcome measures were regressed on a series of the independent variables described above. The results of this analysis will be presented in a subsequent chapter.

#### Summary of the Multi-method Analysis Plan

The above analysis plan is intended to present a comprehensive picture of the nature and dynamics of pharmacists' illicit prescription drug use. This will be by examining

three complimentary and coordinated data sources. Each of the data sources attempts to supplement and support the data from the other two

The results from the analysis of these data sources will be presented in three separate Findings chapters. While each chapter will highlight the unique aspects of the given data source, each will touch upon a series of related themes. For example, each chapter will present data on the descriptive aspects of the respondents. This will be done to substantiate comparisons across the data sets.

Next, each data source will offer a descriptive profile of the drug using pharmacists contained therein. This will involve a discussion of the types of drugs being used, the frequency of use, methods of use, methods of procurement, and the like.

Each data source will offer insight into the onset of drug use behaviors. The archival and survey components will speak only to temporal issues (i.e., when drug use began) but the interview component will speak to both temporal and contextual issues. That is, the interview data will also outline the social and motivational issues surrounding the onset of drug use

The interview and archival data sources will speak to issues regarding the progression of one's drug use involvement. Where possible, the data will be used to show how the pharmacists progressively slipped into a more intensified drug use habit

Most importantly, the interview and survey data will be used to identify the relationship between various social factors and drug use. I will show how the educational, occupational, and professional trends identified in the interview data are statistically supported via the survey data. In particular, the data will show that permissive attitudes toward self-medication, exposure to drug using peers, a lack of drug abuse training in

school and on the job, success in pharmacy school, and historically based attitudes toward the dispensing of drugs are all related to the incidence of drug use among pharmacists.

The summary and conclusion chapter will attempt to tie together the predominant themes that have been presented within the three data sources. This chapter will bring together the conceptual contributions of the project and attempt to offer theoretical and practical implications that are spawned by the data.

## CHAPTER IV FINDINGS OF THE PERSONAL INTERVIEW COMPONENT

### Participant Demographics

In the Research Methodology chapter, I outlined the details of the snowball sampling technique (Berg, 1998) that was used to gain access to pharmacists with drug use histories. This recruitment strategy yielded a group of 50 pharmacists. In total, the interviewees included pharmacists from 24 different States.

Table 1 contains a variety of demographic information about the interviewed pharmacists. A series of demographic variables are listed down the left side of the table. The first column of data outlines the demographic characteristics of the 50 interview participants. The far right column presents the available demographic information for the entire population of practicing U.S. pharmacists.

Referring to Table 1, notice that the interview participants were predominantly male (78% male vs. 22% female). These data also illustrate that the interview sample was made up almost exclusively of Whites (96%). There was only one African American and one Hispanic in the interview group. Note that the interviewees ranged from 27 to 62 years of age. The average age was 41.4 years. The age distribution (see Table 1) was as follows: 8% were under 30, 38% were in their 30s, 36% were in their 40s, 12% were in their 50s, and 6% were over the age of 60.

Table 1 Demographic Characteristics (as %) of the Interview Participants and the Population of Practicing U.S. Pharmacists.

Variable	Interview Participants (N = 50)	Practicing U.S. Pharmacists* (N = 179,445)
Gender		
Male	78	64.2
Female	22	29.2
Unknown	--	6.2
Race		
White	96	81.9
African American	2	2.4
Hispanic	2	1.4
Asian	--	3.3
American Indian	--	.5
Unknown	--	10.7
Age		
0-29	8	6.3
30-39	38	28.6
40-49	36	25.2
50-59	12	15.2
60+	6	16.2
Unknown	--	8.3
Degree Status		
Bachelor's	84	84.1
PharmD	4	6.2
Master's	12	4.7
Other	--	1.4
Unknown	--	3.5
Practice Setting		
Hospital	28	23.6
Chain Retail	26	33.1
Independent Retail	16	32.6
Home Infusion	6	--
Nursing Home	4	2.2
Temporary Contract	2	--
Other	--	8.4

\*These data were obtained from the Pharmacy Manpower Project. This nationwide study offers demographic data on 179,445 of the 194,570 licenced to practice in the U.S. on 12/31/92.

The data on degree status (Table 1) show that the vast majority (84%) of the interview participants held Bachelors of Science degrees in pharmacy. Another 12% held Masters degrees. The remaining 4% had obtained PharmD<sup>1</sup> degrees

The data in the left column of Table 1 also illustrate that there was a diverse occupational status among the interviewees. For example, 28% were working in hospital settings, 26% were working in retail drug chains, 16% were doing independent/community pharmacy work, 6% were in home infusion, 4% were working in nursing homes, and 2% were working as a temporary contracted pharmacist in various settings. Notice that nine (18%) of the pharmacists were no longer in pharmacy work. Three of these individuals were not practicing because their license had been revoked or suspended.

Note that a diverse distribution was observed in the marital status of the respondents: 58% were presently married, 26% were divorced, and 16% were single. The religious composition of the interview group was as follows. 38% were of Protestant denomination, 28% were Roman Catholic, 10% were Jewish, 16% claimed to be Nondenominational, and another 8% (N=4) claimed no formal religious affiliation.

In the early 1990s, the Pharmacy Manpower Project was conducted. This collaborative research undertaking involved the cooperation of a host of national pharmacy organizations.<sup>2</sup> Its goal was to assess the demographic characteristics for the entire population of U.S. pharmacists. The findings (Martin, 1993) offer us the most up-to-date source of demographic information on the 190,000 plus pharmacists who are currently licensed to practice pharmacy in the U.S. An overview of these results are presented in the far right column of Table 1.<sup>3</sup> These data offer valuable baseline demographic information that can be used to better assess the representativeness of the composition of the pharmacists who have agreed to participate in the present study



The gender data in the far right column of Table 1 indicate that a significant majority of the nation's pharmacists are males (64.6%). An even greater majority are White (82.6%). The age data suggest that U.S. pharmacists are largely middle-aged; more than 60% are under the age of 50. Referring to the data on degree status, one sees that the vast majority (86.2%) hold a Bachelor's of Science degree in pharmacy. Finally, note that there is considerable diversity in the practice setting variable: almost one-third of all U.S. pharmacists are practicing in independent community pharmacies, another one-third are practicing in chain retail settings, and just under one-quarter are practicing in hospital settings.

On the whole, the information in Table 1 suggests there are significant differences between the demographic makeup of this study's snowball sample of interviewees the larger population of U.S. pharmacists. In particular, there are disproportionately larger percentages of Whites and Males represented among the sample of recovering drug using pharmacists. There are also less dramatic differences in the average age, degree status, and job setting variables. These demographic disparities were expected. Since similar demographic characteristics have been observed in each of the previous studies of recovering pharmacists (Bissell et al., 1989, Gallegos et al., 1988, Sheffield, 1992). The details of this demographic profile is also supported by the existing apprehension and treatment data (NARD, 1988, Penna & Williams, 1985). In short, all of the available evidence suggests that recovering drug abusing pharmacists tend to be highly educated, White, Males who are disproportionately in the 30- to 40-year-old range.

The reoccurrence of a similar demographic profile in different samples of recovering pharmacists generates several sociological considerations. First, the presence of disproportionate numbers of well educated pharmacists suggests that the educational

process may have some effect on their personal propensity to deviate. The existence of large numbers of recovering pharmacists between the age of 30 and 40 presents yet another consideration. In fact, 74% of the interviewees were between 30- and 50-years old. Pharmacists in this age group would likely have attended pharmacy school during the late 1960s and early 1970s. This era was marked by more permissive societal attitudes toward experimentation with drugs, and more importantly, widespread recreational drug use among young people. Numerous comments to this effect were offered by the 50 recovering pharmacists that I interviewed. Therefore, it is reasonable to suggest that these more tolerant societal views also permeated the walls of pharmacy school and pharmacy practice. Given what is known about the temporally progressive nature of drug abuse and addiction, it is understandable why we are now beginning to notice the evidence of even larger cohorts of drug abusing pharmacists.

### Drug Use Behaviors

Each of the 50 pharmacists that I interviewed spoke at length about the details of their drug use histories. Their frank openness was undoubtedly facilitated by the fact that they were all members of some form of substance abuse support group. The vast majority were actively involved in either Alcoholics Anonymous or Narcotics Anonymous. Having experience with a support group meant that our interview conversation was not the first time that they had recounted their problematic drug use past as it is commonplace for substance abuse support groups to encourage individuals to "tell their story" to the other members of the support group. Moreover, each individual indicated that their support group involvements encouraged them to engage in a "substance use inventory" wherein they documented the intricate details of their past drug use behaviors.

As expected, there were many unique aspects to each individual's drug abuse and usage past. However, my thematic content analysis revealed several noticeable trends and patterns. These trends will be summarized below. In particular, I will focus my discussion on the following substantive topical areas: the nature and extent of drug use, drug procurement, and how and where the drugs were used.

#### Nature and Extent of Drug Use

Each individual's past was marked by an extensive drug addiction history. All 50 individuals recounted daily drug use. They all showed clear signs of being chemically dependent on one or more prescription drugs. The constant presence or threat of physical withdrawal was the most obvious indicator of chemical dependency. Most individuals described progressive drug use situations wherein even short periods of abstinence would lead to withdrawal. For example, one 39-year-old male pharmacist said,

Two years before I sobered up I was really reaching my bottom. I would chase these delivery trucks down in the morning, because I didn't come to my store until mid afternoon. I was in withdrawal in the morning, and I was without drugs, so I had to have it, I was just going nuts. Many mornings I had gone to work sweating. It would be 30 degrees, it would be January, and the clerk would say, you look sick, and I would say, it's the flu.

Almost all of the respondents spoke about a conscious or unconscious recognition of their chemical dependency, especially the coinciding threat of physical withdrawal. To counter this threat, most of the pharmacists maintained a near perpetual state of chemical intoxication. That is, they generally designed a tightly structured and continuous drug use pattern to avoid physical withdrawal. This trend is demonstrated in the following comment made by a 38-year-old female pharmacist:

During the last 4 years of my use I used every single day. Day in and day out, all the time to try to stay out of withdrawal and just maintain.

Many individuals described how they had progressed to dosage intervals of an hour or less. One 45-year-old male pharmacist said,

It was just crazy . . . I just kept taking more and more stuff because I loved it . . . Percosets [narcotic analgesic], you know. CII's, it was unbelievable. And I would be popping these things and 30 minutes later I'd have to pop some more. It just really snowballed fast on me until I wasn't knowing what I was doing . . . Oh gosh, I was probably doing 20 Percoset a day at work.

Only 10 of the 50 interviewees described a drug habit that focused on a single type or class of prescription medication.<sup>4</sup> Three of these individuals engaged in heavy, daily use of cocaine (up to 5 grams per day). The other eight individuals claimed that their drug habit was exclusively focused on narcotic analgesics.<sup>5</sup>

The remaining 40 respondents can be described as "poly-drug users."<sup>6</sup> Their daily drug use behaviors included multiple types and classes of controlled substances. Thirty-two of these 40 poly-drug users were regularly using at least one type of narcotic analgesic. However, their narcotic analgesics habit usually coincided with the use of some other class of prescription medication such as amphetamines (e.g., Dexedrine, Ritalin), barbiturates (e.g., Seconal, Phenobarbital) or benzodiazepines (e.g., Valium, Xanax). As a 45-year-old male pharmacist explained

I was taking amphetamines, not necessarily every day but occasionally. The opiates [narcotic analgesics] I was taking every day. And the benzodiazepines I was taking sporadically . . . daily. So, it was mainly opiates.

Note that many of the interviewees chose to mix alcohol with prescription medications. In fact, a considerable number of the respondents described daily or weekly drinking habits. Most of the drinking can be described as binge drinking behavior wherein the individual drank high volume over a short period of time

Similarly, a number of respondents indicated that they sometimes mixed street drugs with the prescription drugs. For example, five of the respondents described occasional marijuana use. In most cases, the street drug use was not daily, instead taking on a weekly, monthly, or "special occasion" use trend

It was common for a pharmacists' poly-drug use habit to be marked by a baseline drug use regimen. That is, pharmacists would often describe how they would ingest the same combination or "cocktail" of drugs every day. These cocktails usually included the same amounts and types of drugs on each occasion. For example, the 45-year-old pharmacist quoted above went on to explain that he maintained a minimum daily dosage schedule for his narcotic analgesic intake. This trend is further illustrated by an exchange that occurred between myself (I) and a 33-year-old male pharmacist (P):

I: You say that was your cocktail?

P: Yeah, Xanax or some substitute benzo [benzodiazepine], Tylenol number three or four [narcotic analgesics] or some Vicodin [narcotic analgesic] or any other opiate I could get my hands on, a few beers, four or five beers, or wine coolers or any other alcohol that I could get my hands on . . . and pop. That was my favorite cocktail. I would mix those together.

I: How often did you do that?

P: Every day

I: Once a day?

P: That would be deceiving to say that because it was, on the weeks that I worked, I would come home at seven in the morning and wait until . . . [my wife] went off to work. I was really a morning drinking and druggie, as soon as she went off to work and that would last pretty much all day.

The existence of a cocktail-centered drug use regimen was almost always accompanied by additional extraneous drug use. Each poly-drug user was asked if they considered themselves to be a "garbage head." This is a term used within the drug treatment and support group communities to refer to an individual who will use any type of drug

that they can gain access to. Thirty of the 40 poly-drug users characterized themselves as garbage heads. They routinely described extensive drug use experimentation. For example, a 48-year-old male pharmacist explained that his Narcotics Anonymous sponsor once required him to physically write down every drug type that he had used over the course of his 15 year drug use career. He claimed that this exercise yielded a list of 144 different types of medications. The following interview excerpts are indicative of the types of responses that I received when asking about the breadth of pharmacists' drug use. A 43-year-old male pharmacist said,

I did it all. You know we were kind of garbage cans. My drug of choice was Codeine. I did a lot of Acetaminophen with Codeine. I started out with Aspirin and Codeine, like Empirin, but the Empirin hurt my stomach so you know being really dumb I went to Tylenol with Codeine and stayed strictly with that [all narcotic analgesics]. But I was not a downer lover, I didn't like to be zoned out like pot made me. I liked to be up and fired up and moving. Codeine did that to me, unlike others it didn't cause the drowsiness that gave me a surge. But still, I had to try other things to see what worked best together.

When asked what types of drug he preferred to use, a 42-year-old male pharmacist replied,

Anything. In the beginning anything. No matter what it was. If it had that "C" with the little lines in there . . . CII, CIII, CIV . . . I had to go and do it.

This garbage heading trend is further illustrated by the comments of a 38-year-old male pharmacist:

I tried everything, literally. The only drug I've never even tried is cocaine. That's the only drug I've never tried, amazingly enough.

Most of the respondents described how they would ingest large amounts of drugs each day. Only a small minority engaged in what would be considered the approved or recommended use of any of the myriad of prescription medications that they were using. The pharmacists routinely recounted what can only be characterized as staggering daily

dosage schedules. For example, one pharmacist described how he was injecting 500mg of Morphine per day. Another individual claimed that he was injecting 500mg of Demerol each day. Several other respondents described how they were injecting in excess of 100mg of a narcotic per day. The intravenous users were not the only ones who displayed staggering drug use patterns. Several individuals were ingesting more than 100 Percodan or Percoset pills each day. Two separate Cocaine users explained how their habits had progressed to a daily intake of 5 grams per day. Any one of the above drug use habits would easily kill the average horse, let alone a human!

### Titration

An interesting trend emerged from my inquiry into the development of a drug tolerance. Early on in the interview process, I was exposed to a drug use practice called "titrating." This term refers to a practice whereby individuals literally apply pharmaceutical knowledge to balance their personal drug use behaviors by enhancing, neutralizing, or counteracting specific drug effects through ingesting multiple types of drugs. In effect, they would walk a chemical tightrope that allowed them to remain high, function, and avoid obvious physical signs of drug use. For example, one 44-year-old male pharmacist said,

When I was out partying I could drink. See I didn't drink at work. That's one of the ways that I got heavier into the benzos [benzodiazepines] and the barbs [barbiturates] . . . you could take something like that and get the sedative effects, but it wouldn't smell on your breathe. So I would not drink, but basically I had to wake up . . . I would put about 4 Percosets [narcotic analgesic] and 4 Biphetamine 20mg or Dexedrine [amphetamine] with the Percoset. When it was time to roll out of bed, to try to get to work, I would swallow all that and wait a little bit until it would start to kick in. And then I would just compulsively swallow whatever Percoset I could get my hands on. And swallow amphetamines as needed to titrate my energy levels to being productive and not to appear in impaired from the opiate. And then when I took too much of the amphetamine I would take a Valium [benzodiazepine] or take one of the benzos to take away the jitteriness. . . . So, basically what I did was I had this wake up in the

morning and many times I had a couple of benzos in it, but it was heavy on amphetamines and opiates, I would swallow this and throughout the day I would titrate myself so that I was functional and that I could perform at work. At night when I would go out of work, then it was time to drink, it was time to smoke pot or dope and it was time to do whatever.

Notice how this pharmacist speaks about using his titrating behavior to achieve three different goals: for the physical euphoria, to avoid negative physical side-effects, and to avoid detection. All three of these concerns were seen in varying degrees among the 28 pharmacists who described titrating behaviors.

For example, the use of titrating to achieve heightened physical euphoria is depicted in the following quote from a 39-year-old male pharmacist:

At this point, a good day is when I've gotten the titration right, and I'm literally titrating eight or ten different drugs a day just to get the right buzz.

A more extreme example of this euphoria motivated titrating is seen in the comments of this 37-year-old male pharmacist:

There were moments when I'd be out of control. I would fall and seizure in my home and end up in the hospital in a blackout and so I was just going to be more careful next time. And I would try and dose it differently. That's what I did. It never occurred to me to stop using because I thought I would, I mean what would you do if you couldn't get loaded?

The pharmacists recognized the physical side-effects associated with their progressive drug use. As such, many had to actively apply their knowledge of drugs effects and drug interactions in an effort to minimize or head off negative physical side effects. These side effects ranged from hangovers to drug induced seizures. This type of titrating is illustrated in the following quotations. One 50-year-old male pharmacist said,

I knew what I could do . . . I would drink so much I would get so hung over and then I would tell myself I just can't even barely get out of bed. So I would take some opiate and that would calm down my intestines, I had colitis. I would take amphetamines to wake myself up, I would take Valium [benzodiazepine] to slow down my shakes.

Similarly, a 35-year-old male pharmacist said,



Tylenol #3 [narcotic analgesic] was good, Tylenol with Codeine. Actually I liked Tylenol #4s better because you didn't get so much Tylenol and you'd get twice as much Codeine than with the Tylenol #3s. I liked the combination products. Of course Codeine by itself is fetching too, so if you have it in combination with a Tylenol you have a schedule 3 drug and so I liked Tylenol #4s a lot. Did a lot of benzos [benzodiazepines] too. . . . You heard Jean [a conference speaker] talking today about the balancing act. Yeah, so I'd use my amphetamines and I'd see well I'm getting close to seizure area, I'd better take these drugs which are all anti-seizure drugs too. Besides they were calming and sedating . . . I could always get rid of all that.

The pharmacists were usually keenly aware of the ways in which certain drugs would bring about changes in their physical appearance. As such, they would use their pharmacological knowledge to counteract visible signs such as shaking, bloodshot eyes, or "clammy" skin. For example, one 44-year-old female said,

I was out partying every night. I'd come in in the morning, and I was really too sick to do the work, but I'd come in and I could do several Vicodins [narcotic analgesic]. If you do Vicodins, it will constrict your pupils. So the way I get around that is I take some Donnatussin elixir [anti-spasmodic], and that will dilate your pupils. And I knew how much to take so I could lock them to where they look normal. But then your eyes would also be red, so I'd use some Prednisolone Acetate [anti-inflammatory steroid]. I mean, just one thing after another.

Regardless of the motivational focus, there was clear evidence that pharmacists' titrating behaviors had evolved out of their pharmaceutical training. Most pharmacists did not hesitate to state that they had learned how to titrate by applying class lectures or by reading books or articles on pharmacology. This trend is illustrated in the following exchange between myself (I) and a 56-year-old male pharmacist (P):

I: It seems like you were really putting your expertise to work there?

P: Yep, all my knowledge of pharmacology so I could get perfectly titrated. And I'd go in there [to work], and 15 minutes later I could be snowed over.

Further evidence can be seen in the following exchange between myself (I) and a 41-year-old male pharmacist (P):

I: As you are going through pharmacy school, you are learning all about these drugs. Is that changing your perception at all? I mean, you have to now know the toxicology of these things, the addictiveness, the addictive potential and what not?

P: Yeah, because now that I knew more I knew how to be more careful about it, to fine tune my taste. I knew what to stay away from and what to go towards. I knew how to keep from overloading my own system. I knew when I was starting to get toxic, and I could adjust my drug use.

I: So it didn't slow down your use, it didn't cause you to think, oh, this is bad? It more allowed you to see exactly how to do it and do it better?

P: Exactly right! For example, access to the pharmaceuticals, if I didn't steal Percodan [narcotic analgesic], I knew that I could take a Tylenol #3 [narcotic analgesic] and something else and enhance the high and get that. I knew how to create that synergistic effect so that much inventory wouldn't be missing. Because it wasn't always Percodan, I would sometimes do a Tylenol #3, and those were ... sold by the thousands for a week type of thing. It was such a big mover. So I could keep myself high and keep myself from developing the toxicity by combining other drugs and that sort of thing

Above, I have presented evidence of garbage heading and titrating behaviors among the respondents. There is a subtle difference between these two terms. Garbage heading refers to the broad scope of one's drug habit (i.e., willing to use multiple drug types). On the other hand, titrating refers to the intricate, multifaceted application of those drugs that features an application of one's pharmaceutical knowledge. Widespread presence of garbage heading and titrating behaviors among the interviewees offers important support for my assertion that being and becoming a pharmacist affects individual's drug use. Clearly, these individuals were exploiting their heightened access to prescription drugs and then applying their educationally and occupationally-based insight to enhance and inform their drug use behaviors.

#### Drug Procurement

Being a pharmacist had an even more prominent effect on the ways in which the interviewees chose to obtain the drugs that they used. All 50 of the pharmacists admitted

to stealing drugs from pharmacy stock. In most cases, their theft patterns were quite extensive and existed over long periods of time. For example, a 39-year-old male explained

I was the store assistant manager, or manager. What I would do is work the pharmacy generally like once a week, or whatever, and when I was there I'd get my little 8 1/2 g bottle, and I'd pour it full of Valium [benzodiazepine]. I mean, for years I never went anywhere without this little bottle in my pocket.

Similarly, a 41-year-old male pharmacist said,

The routine was to pull the socks on and keep them with two sets of rubber bands. I'd just go to work, work ten or fifteen minutes and then just do my thing. Wait for a prescription. We'd have to go into this aisle where the shit was that I needed and [I'd] just load up. Once both socks were full, I'd be like, good, now I don't have to do that no more. I've got enough till the next time I work.

The data clearly show that the personal use was the principal motivation behind these drug thefts. All 50 pharmacists report that they were using pharmacy stock as the principal source of feeding their drug habit.<sup>7</sup> Almost all of the respondents chose to keep these drugs for themselves. Only five of the interviewees claimed that they had ever sold any of the drugs that they stole. Moreover, only eight pharmacists reported ever sharing any of their stolen drugs with friends or family members (i.e., spouses).

The interviewees described how the nature of the pharmacist's job made drug theft an easy venture. Autonomy is a central feature in all pharmacy practice settings. Pharmacists are usually left in an unsupervised role while they order drugs, account for the daily inventory, dispense large numbers of dosage units, and conduct and document annual or biannual drug audits. In many cases they are allowed to fill telephone prescription orders.<sup>8</sup> As such, pharmacists are given ample opportunity to divert prescription medications from pharmacy stock. With minimal planning, a creative pharmacist is able to perpetrate any number of diversion schemes.

Only a small minority of the pharmacists saw a need to adopt involved strategies to cover up their drug diversion. For example, only 10 pharmacists claimed that they forged fraudulent prescriptions to obtain their drug supply. However, those who were bold enough to do so, were able to obtain large drug supplies. For instance, a 36 year-old male pharmacist said,

I was writing scripts for about like 200 Dilaudids [narcotic analgesic] and about 60 Tuinals [depressant], about 200 Percosets [narcotic analgesic], plus whatever else I wanted . . . You know, a bottle of 100 Valiums [benzodiazepine], some Vicodin [narcotic analgesic]. I'd write prescriptions, you know, cover it all. I diverted thousands of dollars out of that pharmacy.

Most of the pharmacists were afraid to obtain drugs via fraudulent prescription. While they recognized the potential payoff in terms of drug supplies, they were deterred by the fact that forging prescriptions meant leaving behind too much physical evidence (i.e., prescription orders).

There were seven pharmacists who relied on their managerial role to maintain a large personal supply of drugs. These individuals would alter accounting systems or divert paperwork trails in a way that allowed their diversion of large amounts (often bottles of 500 or 1000 pills) of drugs to go unnoticed. This sophisticated procurement strategy is illustrated by the comments of a 46-year-old male pharmacist:

Back in '85, I was using Percodan and Percoset [narcotic analgesics]. Ten of each at a time, four to five times a day . . . so up to 100 tablets a day. I had power of attorney to order them. I would throw away the 222 forms [a required DEA form] and that was it. I was the Director of Pharmacy at the hospital. It wasn't hard at all.

The pharmacists recognized that there were many ways in which they might have maintained their drug supply at the expense of the patients. For example, they could substitute foreign agents (i.e., saline solution or other harmless placebos) into a patient's prescription order and divert the original substance. They could under fill a patient's

prescription order (i.e., include 48 pills instead of 50) and keep the difference for themselves. However, only four pharmacists admitted to involvements in any form of diversion that would result in anything less than a complete and safe product for their patients. In fact, when asked about such practices, most pharmacists appeared offended by the suggestion.

Most of the interviewees avoided elaborate or well thought out diversion strategies. Instead, they chose to keep it simple. They acted as opportunists who always kept their eyes open for potential drug scores. For example, several pharmacists described how they would accumulate large shortages and then cover them up when another mistake or drug violator was exposed. This strategy can be seen in the comments of a 39-year-old female:

I'm just taking them. I wasn't faking prescriptions. Well occasionally I would fake a prescription, but most of the time I wasn't. But somebody stole a couple of bottles of Tylox [narcotic analgesics]. So we called the state drug inspector in and of course then he uncovered the other shortages and when he confronted a coworker. Once he was busted, the slate got wiped clean for me.

A number of opportunistic pharmacists (7) kept their eyes open for expired medications. This drug procurement technique was described in detail by a 42-year-old male pharmacist:

I wasn't doing anything by forging records or prescriptions or anything like that. . . . You didn't have to do that. . . . it was all out dated stuff. That's a classic thing, pint bottles of blue Morphine elixir [narcotic analgesic] when you would send a form into the DEA saying have to destroy this and they would send back and they would say yes destroy it. And two pharmacists had to witness it. By the time it was destroyed, I had taken out the blue Morphine and put in blue water. I was good at making the right color solution and everything so it looked just what it was supposed to look like. Vials that were to be discarded that would have Morphine or something in it, I would just take out the Morphine and put water back in and no one was checking this stuff that way before it was discarded, so it was just like perfect. As soon as you walked down there, there would be other pharmacists and we went down with security too, go to the incinerator, burn it all up and the evidence is gone. Then there was the time I started absconding with ounces of cocaine from the hospital. . . . I would just chart

it as destruction, or something like that, document the destruction and take it home every month, an ounce bottle, and experiment with that

Notice how this pharmacist not only stole the drugs, he also replaced the original substances with some form of visually similar substitute. This strategy allowed him to apparently follow DEA mandates and destroy the drugs in front of a witnessing pharmacist.

Resourceful pharmacists like the one below found ways to expand upon the basic "expired meds scam." This 41-year-old male pharmacist would prey upon expired pharmacy stock as well as the expired medications that concerned patients would bring back into the pharmacy or never pick up:

People look at piles of stuff and they bring it in and say "these are dangerous drugs and she [a relative] passed away. Will you take it?" Sure, fucking ain't right, I'll take it. Yeah we destroy it, it's routine. We routinely destroy drugs which of course you can't track . . . Yeah, anyone who wants to come right on in. Then there's people who don't pick up their prescriptions. They get prescribed controlled substances and sometimes they never pick it up. It's out of the inventory, you are supposed to add it back into the inventory. I added it back into my inventory, I'd take it home.

Many of the pharmacists took the idea of opportunism to the extreme--they merely opened a bottle and ingested the drugs on the spot or hid them somewhere on their person. Popular hiding places included pockets, socks, bras, and even the inside of a necktie. In either case, the pharmacists recognized the opportunity that was inherent in their position as a pharmacist. They knew that the way that the drug inventory system worked and they knew that there was little chance of them getting caught. One 42-year-old male pharmacist described this brashness as follows:

You go over to the shelf, you open the bottle, you hold your pocket, you dump it in, put it back and put it back on the shelf. That's it. Oh yeah, I got a little more sophisticated a bit later on. If I had the opportunity I used to take a piece of paper and fold it up and tape three ends together and I would put a few pills in and I would fold it and then I would put it in my pocket. That way if a tablet got crushed it would not be like all that

crushed dirt in my pocket and if I ever had to get rid of it right away, I could.

Twenty-nine pharmacists described a theft routine that involved the exploitation of drug inventory systems. While there were several slight variations among their descriptions, there was one common characteristic--all 29 used their knowledge of weakness in the pharmacy inventory system and applicable drug regulations to shape their theft behaviors. More importantly, this vulnerability appears to be present in all practice settings (i.e., hospital, chain, independent retail). For example, a 40-year-old female pharmacist had this to say about the inventory systems in the hospital setting:

In a hospital setting it is real hard to keep track of Tylenol with Codeine [narcotic analgesic] because you don't really control drugs, other than schedule 2s. I didn't mess with schedule 2s because . . . every tablet, everything had to be accounted for. The [schedule] 3s, 4s and 5s were not. That was a guesstimate and I just stole them.

A 33-year-old female pharmacist had similar things to say about the inventory systems in chain retail pharmacy:

I was doing relief work in a couple of pharmacies. In a retail store, if it's a Class III, IV, or V, it's no big deal, really. I mean, you get a bucket of 1,000 Tylenol #3 [narcotic analgesic] sitting there, they're not gonna miss 10. Some of the Schedule IIs, I mean, I've done things like blatantly steal 5 dosages of whatever Class II.

Finally, this theme was reiterated for the independent retail setting. Namely, a 41-year-old male pharmacist said,

This independent didn't inventory their CIIs and we did massive volume. So I'd go to fill a prescription, I'd just grab about 500 and just pour them out in my hand and just put them in my pocket. . . . And the clerks would be right there, and I'd just grab it, and say, "fuck this," and grab a couple more. I had to take something home with me.

Pharmacists claimed that they were confident that they could get away with stealing those drug types that the pharmacy filled in high volume. Federal regulations only require that shortages in excess of 5% of the annual dispensed volume must be reported.

Most pharmacy employers make a conscious effort to meet, not exceed these standards.<sup>9</sup> However, if a pharmacy fills hundreds of thousands of dosage units of a given drug type, a pharmacist can safely divert large quantities and never have to make an effort to cover their tracks. They became comfortable in knowing that nothing would ever come of the shortages. As one 27-year-old male pharmacist remarked,

I mean, there are always going to be numbers missing just because of error anyway, just because they didn't get the sheet [prescription order] back, or it went to the wrong place, got misfiled, or something. So there's always problems in those records. Any hospital pharmacy that gets inspected is going to have some problems, but that's just the way it is because there's not a good system right now. They are real easy to scam if you know what you are doing.

These pharmacists also knew that they would eventually be expected to query the pharmacy stock in an annual or bi-annual drug audit. This presented the pharmacist with a golden opportunity to remedy the shortage problem that they had accrued over the past six months to a year. They would simply round down their inventory estimates and minimize the perceived levels of loss. For example, if a 500 count bottle of Valium had only 10 pills left in it, they would offset losses by recording the current level at 490 pills.

In sum, the pharmacists' familiarity with the federal and local (workplace regulations) rules and regulations allowed them to devise schemes to steal their drugs of choice without being detected. In most cases, they were able to sustain high levels of daily or weekly diversions over long periods of time. Given their often extensive usage levels, this means that most of the interviewees were able to steal tens of thousands of dosage units each year without being detected. Moreover, their experience with the system allowed them to perpetrate these thefts with little if any planning or intricate cover ups on their part.



### How and Where the Drugs Were Used

Oral ingestion was clearly the favored method of drug administration among the interviewees. Of 50 pharmacists, 39 typically used pills or elixirs. Eight of the interviewees chose to inject drugs. All eight of the needle users were involved in the intravenous or subcutaneous<sup>10</sup> use of narcotic analgesics. The remaining three respondents were cocaine users and administered their doses by either snorting or smoking the drug. Note that past studies (Bissell et al., 1989) have consistently found that pharmacists prefer oral drug use over other drug use options. This makes sense since most pharmacists deal predominantly with pills and elixirs and tend to come in contact with IV drugs less frequently.

Almost all of the respondents reported prescription drug use away from work. In order to be able to use drugs outside of work, the pharmacists had to first accumulate a personal stash of drugs. In many cases, the interviewees described how they became quite meticulous about the maintenance of a well rounded and available cache of drugs. They would keep their reserves on their person, in their car, and at home. The pharmacists reasoned that it was best to have a number of different drugs available to them in case unforeseen circumstances might arise. Possible problems might include unanticipated withdrawal, a sudden need to leave town, periods of illness or vacation that would keep them away from work, or the careless overuse of a given substance or combination of substances (i.e., they wanted to be able to titrate away the problem). This behavior is illustrated in the comments of a 45-year-old male pharmacist:

I mean when I go on vacation I'd have to take 1500 pills, 2000 pills with me. I'd stash them in all different places. We went down to Columbus and I thought that I forgot my pills. I panicked. I didn't know what the hell I was going to do. I was going to drive back . . . I didn't know what the fuck am I going to do. Luckily I found my stash, I hadn't forgotten it after all.

Another 45-year-old male pharmacist said,

I'm taking them at home, too, at this point. At this point I'm thinking about having a stash available like for days that I'm not at work or times that we're going places. I'm thinking, I'm starting to get into this thinking about not only using but finding the stuff to use in the future.

Maintaining a sufficient drug supply required constant attention. Due to heavy use patterns, the pharmacists had to be constantly replenishing their stash. Thus, the pharmacists worked themselves into a precarious cycle. They would steal drugs because they thought that having the drugs would help control their unwanted side effects. Unfortunately, having the drugs led them to use more. As a consequence, they would have to further exploit their professional position and steal even more drugs. At every turn, their well conceived plans and rationalizations seemed to crumble before their eyes. And the end result was almost always progressively higher drug use and more drug theft. This progression can be seen in the remarks of a 42-year-old male:

I would take something home with me, because I couldn't not do it. I was in the middle of addiction. Like I would take some pills and put a handful, sometimes I would go with a big, bulging pocket full, I'd take it all home and then I'd curse myself for doing it and I would go and have to put it back. I traveled pills back and forth all the time trying not to do it. Because it's bad, it's bad . . . It was dishonest. You could get in trouble, you know, I'm not supposed to do that. I want to be, I always wanted to be a good pharmacist. It was only my intention to experiment and have a little fun. But here I find myself, and I could not get sober at all.

The pharmacists were not only stealing drugs for use after work, but the majority of the interviewees admitted that they routinely used the drugs either before or during work. The data show that the pharmacists were often quite brash about their use and escalated to the point where they would use the drugs on the floor of the pharmacy. Moreover, their on-the-job drug use was often quite heavy. These trends are illustrated in the following interview excerpts. The first is from a 39-year-old male pharmacist:

I'd be in the back row of the pharmacy putting needles in my arm, take a handful of pills, walk past the cough syrup section, knock down some Codeine [narcotic analgesic], and just wait for the shakes to pass, and then come on out and fill prescriptions.

Further evidence for this trend can be seen in the following exchange that occurred between myself (I) and a 56-year-old male pharmacist (P):

P: I was dissolving the Demerol [narcotic analgesic]. I would take my Demerol, crush it up behind the counter, dissolve it and that sort of thing, and then pour it into a vial. Then I would head into a bathroom and then draw it up.

I: So you'd do all the dissolving and everything right there behind the counter?

P: Right.

I: That would be a bit risky wouldn't it?

P: As far as they knew I was compounding. Because they tried to keep it down to just one pharmacist on [duty], except for during peak periods. And the techs, they didn't have a clue.

### Effect on Performance

This type of on-the-job use of prescription drugs raises serious questions about the pharmacists' ability to competently perform their duties. Interestingly, only a handful of the pharmacists thought that their drug use impaired their work skills. And in every case, it took severe signs of physical or psychological impairment for the individual to define their behavior as problematic. For example, one 39-year-old male pharmacist said,

I just felt quicker than most. I don't know if it was the opiates or what. My usage became daily and then it became on the job and I was really impaired on the job a few times. I mean barely able to speak, let alone fill prescriptions.

Similarly, a 48-year-old male pharmacist commented,

It just got so bad in the end that, you know, there was no doubt I had become so impaired by the end of the day to the point that I could not even drive home safely. I mean I drove, but I couldn't drive safely.

In the most severe case, the drug use led to a prescription error and the death of a patient:

On one job site, the very first job I ever worked at as a licensed pharmacist, I killed one of my patients mixing some open heart solutions incorrectly and the patient died. I was fired. That was directly related to my substance abuse, but they never knew. When my boss asked, I lied. I said oh no. He said okay I just had to ask. I was a mess . . . slurred speech on the job many times. I went from having rules to having no rules. I would never use before [noon]. I was never going to use while I was at work, and so of course they [the self-imposed rules] all changed.

The vast majority of the on-the-job drug users denied that their use was having a detrimental effect on their work. Instead, they actually cast their drug use in a positive light. They convinced themselves that it was even enhancing their work skills. This trend is perhaps best illustrated by the comments of a 37-year-old female pharmacist:

I had two positive reinforcements to take the stuff. Of course I was on duty when I was affected by it, but you know I was doing a good job. I was getting positive comments from the customers. Of course I felt great and I wanted to tell them everything that I learned in pharmacy school. . . . And the management, they were happy because the speed kept me moving one hundred miles an hour.

Similarly, a 44-year-old male pharmacist said

I would use it [Percodan--narcotic analgesic] to enhance, or what I thought to enhance, my working abilities. And who knows, maybe it did for a while.

Further evidence is offered in the following exchange between myself (I) and a 39-year-old male pharmacist (P):

I: Did you think it was making you work better?

P: Yeah, when I would do amphetamines. I used to do that because they were stimulants and they would . . . I thought . . . I could work better.

I: You certainly didn't see yourself as impaired?

P: No.

Each of the above quotes illustrates how the pharmacists were able to rationalize their on-the-job drug use. They appealed to their sense of professional responsibility and

reasoned that the drug use was necessary to maximize their work potential. As long as they were not confronted, forced to come to grips with obvious mistakes, or unable to physically function, most pharmacists were able to maintain a martyr-type view of their on-the-job drug use. In effect, they reasoned that the drug use was necessary, it enhanced their ability to deliver important pharmaceutical care to waiting patients.

This trend is especially telling. It speaks directly to the ways in which these individuals defined and perpetuated their drug use behaviors. In particular, this finding offers further evidence of what Cressey (1957) called "vocabularies of adjustment." First, the data show that the pharmacists were able to redefine or rationalize their drug use by focusing on the therapeutic effects of the substances. This, in turn, absolved them of the shame associated with being an impaired pharmacist who jeopardizes the health of one's patients. Second, the conversations suggest that pharmacists used their martyr-based thinking to shape their normative definitions of on-the-job drug use. That is, these thought processes appear to be referenced as *a priori* neutralizations that allow for more and more routinized and progressive drug use while at work. As such, there is evidence that these self-assessments of on-the-job drug use have causal significance that help explain how and why the pharmacists are able to slowly progress into increasing levels of drug use.

#### Onset and Progression of Drug Use Behavior

One of the central goals of this dissertation is to articulate the circumstances surrounding the onset of the pharmacist's initial illicit prescription drug use. As such, a considerable amount of the interview conversations and subsequent content analysis was focused on the pharmacists' early drug use behaviors. It became apparent that there were two distinct types of illicit prescription drug users. Some of the pharmacists began using

prescription drugs to get high. These individuals usually had a history of street drug use and were interested in expanding their drug use behaviors into the realm of prescription medicines. There was a clear recreational component to their drug use. However, their heightened access, opportunity, and knowledge about prescription drugs led to a downward spiral into drug abuse. I have termed these drug using pharmacists "bad-intentioned misusers."

Conversely, many pharmacists began using prescription drugs for medicinal purposes. These pharmacists were convinced that they knew enough about the drugs to medicate themselves without consulting a doctor. Over time, continued and expanded self-medication led to greater tolerance and more drug abuse. I refer to this type of drug using pharmacist as a "good-intentioned self-medicator." The details of two categories of pharmacists are discussed below

#### Bad-intentioned Misusers

Of the 50 pharmacists interviewed, 23 were classified as bad-intentioned misusers. These individuals almost always began experimenting with drugs during their teenage years. Their early drug use was clearly recreational. They used drugs such as marijuana, street cocaine, alcohol, and various psychedelics. The motivation behind this use was quite simple, they wanted to get high. A lack of availability usually meant minimal, if any, prescription drug use during these early drug use periods.

The bad-intentioned misusers exploited almost any access or newly acquired pharmaceutical knowledge that they were exposed to. If they read about drugs in pharmacy school, they wanted to try them. If were clerking or interning in a pharmacy setting that offered them access to prescription medicines, they wanted to steal drugs and use them. If a teacher or employer told them about the unusual and new effects of a drug,

they wanted to experiment with it. As such, this meant that these individuals usually began using prescription drugs soon after entering pharmacy school or while working in a pharmacy during high school. The bad-intentioned misuser trend is highlighted in the comments of this 44-year-old male pharmacist:

When we studied Valium [benzodiazepine], I had to find out what Valium was. . . . If I studied a class of drugs, I had to say, "Well, I don't know that I don't understand that. What did they mean by tranquilizer? What did they mean?" I'd have to find out. Then, of course, I found the ones that I liked and the ones I didn't. . . . It got worse when I got on the job. It was so fascinating to me, reading the prescriptions and going and finding the drug back there. He [preceptor] would let me do everything a pharmacist did. But then I had to leave it there for him to check. It was my first introduction to everything. Then I was learning about it, like that's an amphetamine. Those look really cool. And this is Demerol [narcotic analgesic]. Well that looks really cool. I wasn't really learning about them and stealing right off the bat or anything. It was like, I would take inserts home and read about it. It was just so fascinating to me. That's when I was learning about it and reading it as much as I could read and learning about the different classes of drugs and everything. That's where it definitely, definitely started.

Recreational and experimental drug use. These pharmacists were quick to point to the recreational motivations behind their early prescription drug use. They were clear about one thing, namely they used these new drugs in an effort to expand or surpass the euphoric effects that they received from street drugs. For example, a 27-year-old male pharmacist said

It was a blast. It was fun. . . . It was experimentation. We smoked a little pot. And then in the model pharmacy [a training facility in college], there was stuff all over the place. "Hey this is nice, that was pretty nice." If it was a controlled substance then I tried it. . . . I had my favorites, but when that supply was exhausted, I'd move on to something else. I was a garbage head. It was the euphoria. . . . I used to watch a Cheech and Chong [movie]. That's what it was like. I wasn't enslaved by them, they made the world go round. . . . [It was] better living for me through. That was the norm. That's what life was like, that's what I was about.

Similarly, a 27-year-old male pharmacist said

It was very recreational at first, yeah. It was more curiosity . . . experimental. I had read about all these drugs. And then I discovered I had a lot of things going on with me at that time that these solved the problem for instantly. I had a lot of self-exploration issues going on at that time

Several bad-intentioned misusers claimed that they specifically chose a career in pharmacy because they expected that it would offer them an opportunity to expand their drug use behaviors. For example, a 37-year-old male pharmacist said

Well, I guess I understood that there's a purpose for them [prescription drugs] and a usefulness for them, and a need for them. But in my mind, a lot of times I found those needs in myself. That's one of main reasons, too, I went to pharmacy school, because, I'd have access to medications if I needed them

Further evidence of this trend can be seen in the comments of a 41-year-old male pharmacist:

So I [had to] change my major. So I [based my choice] on nothing more than, well, it looks like fun and gee all the pharmacy majors had drugs. The guys [pharmacy students] that I knew, every weekend when they came back from home, they would unpack their bags and bags of pills would roll out. I thought, "Whoa, I got to figure out how to do this." [I would ask:] "How much did you pay for this?" [They would respond.] "I haven't paid a thing, I just stole them. Stealing's okay. I get shit wages so I got to make it up somehow. So we just steal shit." Well, I thought, this is it. Yeah, I want to be a pharmacist. So I went into pharmacy school.

While many of these bad-intentioned misusers entered pharmacy school with prior experiences in recreational drug use, their precollege drug use was usually not heavy. It was not until they got into pharmacy school that they began to develop pronounced and progressive drug habits. A 41-year-old male pharmacist discusses this transition in the following interview excerpt:

It had been recreational type use. It was pretty consistent. But I was still just experimenting. I hadn't, at that point, become actively addicted. [I was] smoking pot and drinking beer, [doing] psychedelics. Just whatever would come across, if it came across, great, if it didn't, no big deal . . . That was before pharmacy school. By the time I got into pharmacy school, the recreational drug use turned into a fairly steady drug use. Certainly not more than a month to two months would go by without something. I really



started drinking and drugging. A lot of my friends after high school said, "Oh great, you're going into pharmacy school. You can wake up on uppers and go to bed on downers," all that stuff. At first, no. The first time I ever [use prescription drugs] I thought, no, that's not why I'm doing it. No, I'm doing it for the noble reasons. But then after a while, I thought, well, maybe they had a point there after all.

Learning by experimentation. The bad-intentioned misusers routinely described how they got carried away with their experimental approach to prescription drugs. As they learned more about the drugs, their will to use them increased. For example, a 44-year-old male explained

I guess I was one of the people who wasn't just willing to read about the drugs and read what they did. I had to actually take them to see what they did! I learned about them first. Why just read about it in the book and say, "Ah, that's interesting? Let's see what it really does!"

Similarly, a 39-year-old male said

Pharmacy school was interesting. It was a great way to get access to drugs. But it was also . . . I just really got into it. I literally got into drugs. There was this aspect in my drug use that was experimental. There was times when I was addicted to opiates that, when I first went through withdrawal, I didn't know what it was, I thought I had the flu. Then I thought "geez I'm going through withdrawal, holy cow that wasn't too hard I want to try it again." I remember laying in my bed in the morning, waking up early in the morning and knowing I needed narcotics. Just examining how I felt, how my intestines felt, how my legs felt, how they'd be restless or have gooseflesh on them. I used to read a lot about drugs.

Further evidence of this trend can be seen in the following exchange that occurred between myself (I) and a 27-year-old male pharmacist (P).

P: At first, I think it was experimentation. You know . . . we know about this stuff, we can deal with it. Kind of like if someone was majoring in physics or something, I don't know, [they would] play around with a motor or something. It was just something like that.

I: So you treated it as first-hand knowledge?

P: Exactly. But I'd say experimentation was the driving force. That's what it was for me. You know, what is a Valium? What does that feel like? What if you take a Quaalude and drink with it? What happens then?

The pharmacists often described an applied characteristic to their experimental use of prescription drugs in pharmacy school. They explained that they wanted to experience the drug effects that they read about in pharmacy textbooks. These individuals gradually incorporated their newly found scientific training and professional socialization in a way that allowed them to excuse and redefine their use. Namely, they began to see their own drug use as beneficial to their future patients. This explanation is illustrated in the comments of a 59-year-old male pharmacist:

In a lot of ways it [college drug use] was pretty scientific. [I was] seeing how these things affected me in certain situations. Testing the waters. That's a good way to put it. . . . Better living through chemistry. I'll be able to counsel my patients better the more I know about the side effects of these drugs. I'll be my own rat. I'll be my own lab rat. I can tell [patients] about the shakes and chills and the scratchy groin and your skin sloughing off. I can tell you all about that stuff.

Socially acceptable drug use in pharmacy school Many of the bad-intentioned misusers explained how they sought out other drug using colleagues while in pharmacy school. The most common avenue for these associations were pharmacy-specific fraternities. The pharmacists said that there was usually ample drug use going on in these organizations and that they allowed them the leisure to safely identify with other drug users. Once they were united with other drug users, the prescription drug use of all involved parties progressed. This type of group drug use allowed for access to an expanded variety of drugs, a broader pharmacological knowledge base, and even larger quantities of drugs.

The bad-intentioned misusers suggested that there was no shortage of drug use in pharmacy school. For those who were interested, this environment provided ample opportunity to refine and expand their usage. One 48-year-old male pharmacist described the make-up of his pharmacy school cohort as follows:

There was a third of the pharmacy students in there because Mom and Dad or Grandfather or Uncle Bill were pharmacists, and they looked up to them and wanted to be one. Good enough. They had never seen a pharmacy. A [second] third had been in the [Vietnam] war. They were a pharmacy tech in the war . . . Or had worked in a pharmacy. They had the experiential effect of what pharmacy is and found a love for it or a desire to want it. . . . Then you had the other third over here, and we were just drug addicts. . . . It had nothing to do with altruism. We didn't know what the practice was all about, but we did know that we got letters after our names, guaranteed income if we didn't lose our letters, and access to anything we needed.

Pharmacy practice means more access Pharmacy school was just the beginning of the educational process for the bad-intentioned misusers. These individuals explained how pharmacy practice offered them further opportunities to apply their pharmaceutical knowledge. New work experiences meant exposure to new drugs—either they had never seen a certain drug type before or it was a new brand name. This access was followed by some quick research on the drug and then almost immediate experimentation. This is illustrated by a 36-year-old female pharmacist.

One day I saw these Percodans [narcotic analgesic] in the store, actually. "I wonder what they're like?" You know? I read a big schedule 2 on that bottle. . . . wonder what that's like. I remember the first time I took them, I just took a couple of them and I threw up right away. But then I got really high and it was like a great feeling. It was like I was awake, but yet kind of numb. It was what I was trying to get towards.

Similarly, a 37-year-old male pharmacist described the following work experience:

In '82, I remember I came down here and applied for a job . . . in May of '82. I remember even then, I went out to the satellite [pharmacy post] and I heard about this one drug . . . Placidil. As soon as I got up to interview, they were showing be around. A friend took me around and showed me around and I saw a Placidil on the shelf there. It was in the satellite. It was unit dosed in those individual packages. I took a chance, kind of wandering around and I went back and took some off the shelf. So even then, I was, you know, why would you do that in the middle of interviewing for a job? I took it even then. I just jumped at the chance.

When these bad-intentioned misusers got into a permanent practice setting, they quickly realized that they had free reign over the pharmacy stock. Their access meant that

they could now try any drugs that they wanted, and most did. More importantly, increased access allowed the young pharmacists to habitually use the drugs that they liked most.

Their drug use usually skyrocketed shortly after entering pharmacy practice. A 41-year-old male pharmacist explained:

By the time I got to pharmacy school in 1971 it, I was smoking dope probably every day, every other day and drinking with the same deal of frequency. But not to the point of passing out kind of stuff. Then in 1971, that was also the year that I discovered barbs [barbiturates]. I had never had barbs up until I got to pharmacy school. So it was like '75 or '76 [when I got out of pharmacy school], heavy Seconals and Quaaludes and Ambutols [all barbiturates] It just took off.

A sign of the times--"better living through chemistry". There was one last noteworthy trend that emerged among the bad-intentioned misusers. Several of the pharmacists used a "sign of the times" explanation for their drug use. They claimed that the onset and progression of their drug use was significantly impacted by the social climate that existed when they entered pharmacy school. For example, several individuals mentioned the permissive societal attitudes towards recreational drug use and expanded consciousness that were trademarks of the late 1960s and early 1970s. A 48-year-old male pharmacist said,

People knew how to synthesize LSD in the 60s. It was the [Timothy] Leary stuff and this was all in the literature. That's why I was becoming a pharmacist, because I had exposure to this literature. I understood, I knew it. I was going to learn how to use drugs and use drugs properly. . . . It was better living through chemistry.

Another pharmacist, a 42-year-old male, said,

I pictured expanding my consciousness and I guess all the things that went along with the psychedelic era of learning about new and different things and all. I just pictured that I was doing that and that the laws were sort of written to control people who might have problems with this stuff, but that I could handle that.

The late 60s and early 70s were not the only time period that seemed to influence the bad-intentioned misusers. A few of the older pharmacists claimed that they were victims of what one pharmacist called the "golden age of pharmacy." The 1950s were described as an exciting time in which entire classes of drugs simply appeared on the pharmacy scene. Individuals lamented that they got caught up in the positive marketing that was associated with these drugs and began using them. This situation is articulated by a 56-year-old male pharmacist:

[The use was] part of our prequestioning [of] science. Or prequestioning or doubting the wisdom of artificial substances. We don't have to deal with these things today. In those days the drugs represented progress. You didn't have to feel bad. It [the onset of his use] was right after the introduction of major tranquilizers back in the 50s, which seemed to be the answer to everybody's anxieties. This was the age of anxiety. And so Miltown came out. Holy smoke, boy. I tell you, you didn't have to feel bad. It truly was the golden age of chemistry. Better living through chemistry was the motto. And I bought into that. I believed it. Today I recognize it as being a false illusion, but nonetheless, I believed it in those days.

The presence of generational explanations of drug use suggest that pharmacists' drug use may be influenced by societal as well as profession-specific conditions. Namely, these data imply that the onset and progression of an individual's drug use may well be influenced by attitudinal currents that exist within the society at large. This is a particularly interesting overture. Until this point, the discussion has centered on the ways in which factors specific to the pharmacy experience can be shown to influence the drug use behaviors of the bad-intentioned misusers. These factors included newly found access to drugs, the application of pharmacy knowledge, and a decision to expand upon one's street drug use. However, these generational explanations open up the possibility that macro social issues may also shape pharmacists' drug use behaviors.

The above discussion has presented a comprehensive picture of the bad-intentioned misusers. These individuals developed severe prescription drug use habits. In

almost every case, they used multiple types and classes of drugs (i.e., they were garbage heads). Their prescription drug use careers were usually marked by steep downward spirals. That is, they experienced periods of rapid increase in the frequency and amount of drugs that they used. Moreover, the bad-intentioned misusers can be characterized as having very "low bottoms"<sup>11</sup>. Signs of a low bottom included life threatening health problems, repeated dismissal from work, having action taken against their pharmacy license, divorce, and suicide attempts. By all accounts, these bad-intentioned misusers suffered heavily from their drug use.

All of the bad-intentioned misusers had used street drugs before they embarked upon their pharmacy training and practice. However, there is strong evidence to suggest that their pharmacy specific experiences played a large role in the onset and progression of their illicit use of prescription medicines. Over time, these individuals used their familiarity with various aspects of pharmacy to expand their drug use. Thus, their experimental, recreationally based drug use progressed into a polluted existence that was marked by massive drug intake and serious personal and professional problems.

#### Good-intentioned Self-medicators

My data analysis produced yet another category of drug using pharmacists: "good-intentioned self-medicators." This group was significantly different from the bad-intentioned misusers. To begin with, the good-intentioned self-medicators claimed that they had limited or no exposure to drugs when they entered pharmacy school. What drug use they did have usually took the form of experimental street drug use (i.e., marijuana). Many of these individuals did not even use alcohol. If they had ever used prescription drugs, it was done under the strict supervision of a physician.

The general profile of the good-intentioned self-medicator is quite simple. These individuals did not begin their illicit prescription drug use until they were well into their pharmacy career and practice years. The onset of their use was attributed to some form of problematic life situation. Faced with problems such as job stress, insomnia, chronic illness, or physical pain, these pharmacists turned to prescription medicines for relief. These pharmacists explained that over time, their initial therapeutic drug use progressed. Eventually, they found that they developed a tolerance for the drugs and had to take larger quantities or combinations of drugs to achieve the desired effects. In the end they had to face the fact that a once seemingly harmless therapeutic drug use had led then into a serious and sustained drug abuse situation. In all, 27 of the 50 pharmacists that I interviewed fit into the category of the good-intentioned self-medicators.

The following interview excerpts offer a good example of this group of interviewees. The first excerpt comes from a 37-year-old female pharmacist. She said,

I took one Halcyon [benzodiazepine] because I heard that was a really effective way to get some sleep. . . . My intent certainly was not to have happen what happened. But what that triggered, what that set off in my life, was two years of the worst kind of hell that I never want to ever see anybody have to go through again.

A 59-year-old male pharmacist summarized his situation as follows:

For about 14 years I had worked as a pharmacist. And those were the years I would characterize as my "dark years." Because those were the years that led to an increase in involvement with drugs and alcohol. I was treating myself. And I found that I became addicted to the substances that I was using to help myself. [This] is a common theme, I've found.

Similarly, a 50-year-old male pharmacist said,

Well, I didn't have a big problem with that [initial self-medication episode]. I wasn't taking that much. It was very much medicinal. It was not an everyday thing. It really was used at that point for physical pain. But that's when I started tampering with other things and started trying other things. I would have trouble sleeping so I would think, you know, let's see what the Dalmane's [benzodiazepine] like. When I was having weight problems . . .

let's give this Tenuate [amphetamine] a try. And we just started going down the line treating the things that we wanted to treat. And none of it got out of hand there. It wasn't until I came down here, to Arizona, that things really started to go wild.

Therapeutic drug use The good-intentioned self-medicators were clear about one thing; namely, their drug use was never recreational. They never used drugs for the euphoria. Instead, their drug use was focused on specific and/or definitive therapeutic goals. This is illustrated in the comments of a 33-year-old male pharmacist:

There was no recreation involved. I just wanted to press a button and be able to sleep during the day. I was really having a tough time with this sleeping during the day. I would say within, by the end of that week, I was already on the road . . . the race had started.

With the exception of their drug use, these pharmacists appeared to be model pharmacists. For example, they usually claimed that they had excelled in pharmacy school. Their success continued after they entered pharmacy practice. They described themselves as hard working professionals who were knowledgeable and efficient in their work tasks. It was not uncommon for them to attain higher management positions. Moreover, they garnered the respect and admiration of their peers and employers. Most importantly, they maintained that they were committed to principally patient care and saw themselves as highly proficient health care professionals.

These pharmacists described how their drug use began small under seemingly innocent, or even honorable, circumstances. In many cases they were experiencing physical pain from the rigors of work. Rather than take time off from work to see a physician, instead, they saw no harm in self-medicating. A 50-year-old male pharmacist described this situation as follows:

When I got to Walgreen's, the pace there was stressed. We were filling 300 to 400 scripts a day with minimal support staff. We were working 12/13 hours days. The physical part bothered me a lot. My feet and my back and I had been going to the doctor and kept medicating myself until it got to the



point where--I never got totally excessive, I mean I was up to 6 to 8 capsules of Fiorinol 3 a day

Some pharmacists described how they innocently entered their self-medication practices because they wanted to better regulate their sleep schedule. For example, a 49-year-old male said,

I would come home and take 2 or 3 more Percodan [narcotic analgesic] and go to sleep. I mean they worked for me any way I wanted them to. When I needed them to get me up they'd do it, when I needed them to put me to sleep, they'd do that, too, it was the damndest thing. The only real physical side effect I got from it was constipation. I was terribly constipated, but other than that, nothing.

Several pharmacists began self-medicating after they experienced some sort of physical trauma such as a car accident, sports injury, or a broken bone. A 42-year-old male pharmacist described his situation as follows:

So I had this car accident which was quite serious. It was after the car accident that I realized I hurt my shoulder. I got Percodan and then I found out that I loved it. I loved it! It was great! The best thing was to drink with it. So would take the percs and I would drink as much as I could and I [realized that I] wanted more. So I said I would never do it again, but I loved it and there was no stopping that.

Other pharmacists described how they began self-medicating to remedy a chronic health problem such as arthritis, migraine headaches, or back problems. In many cases, they had first sought professional assistance (i.e., a doctor, a chiropractor, etc.) for their condition but were left unsatisfied. As such, they chose to take matters into their own hands. This trend is illustrated by the comments of a 62-year-old male pharmacist.

I had messed up my back good. There was something about the doc said. It was just post-trauma arthritis, you know. Something I got to put up with. But I went to this guy so long, I got tired of him . . . I figured I'd take care of it myself.

A slippery slope. At first, the pharmacists' therapeutic self-medication behaviors seemed to work well. They remedied the problematic situation (i.e., pain, insomnia) and

allowed them to return to normal functioning. However, over time, they began to develop a drug tolerance. This meant that they had to take larger quantities to achieve the same desired effects. It took years for some pharmacists to progress into the later stages of drug abuse. That is, they were able to control their use for a long time without it interfering with their personal or professional life. For example, consider the interview exchange that occurred between myself (I) and a 42-year-old male pharmacist (P):

P: Every time I drink even two martinis I throw up. I get diarrhea and I puke and I'm sick. So I took some Zantac. I tried to cure my hangovers a little bit.

I: These were just for medicinal purposes?

P: Medicinal. Zantac, I mean how can that hurt? And I go to work, but I'm sick and I don't want to go smelling like alcohol. Now I deeply trying to make it. So now I begin to take pills to cure being sick so I can go to work. First I'm taking things strictly to cure hangovers. Which happened with practically drinking nothing and it's scaring me to death. . . . So I start working and I start to take a few pills. I feel a little better. Now they start to happen. I take a couple V's [Valium—benzodiazepine] now and then, I'm taking a few Xanax [benzodiazepine]. Next, I'm taking some Vicodin [narcotic analgesic]. It took years to go anywhere. Then somebody comes in with drugs and says 'these are my mother-in-law's prescriptions, she passed away, she had cancer.' It's all morphine. 'I don't know what to do, will you please take it for me.' We'll destroy the drugs, don't worry (laughs)

This gradual, drawn out, drug use progression is also demonstrated in the following exchange between myself and a 42-year-old male pharmacist:

P: I had a headache. I'd always taken, like if I had a headache or something, I'd take like a Tylenol 3 [narcotic analgesic] back when I started interning, when I worked in the store.

I: It was just medicinal at this point?

P: So I thought. I mean it would be like one tablet a week or something like that. Percodan [narcotic analgesic], I started taking one when I started developing some leg pains. So like at the end of the day I would reward myself by taking the Percodan. That worked up to like one at the end of the day, maybe like five days out of the week or something like that.

Other self-medicators were not so lucky. For them, there was little time between the onset of their use and their entry into drug treatment. For them, the progression was much faster. For example, a 49-year-old male pharmacist said,

About two or three years after I had my store, I was working long, long hours. Like 8:00 to 8:00 Monday through Saturday and some hours on Sunday. And my back hurt one day. It was really killing me and I started out with two Empirin #3 [narcotic analgesic]. Just for the back pain. I hurt. My back hurt, my head hurt. I don't know why, but I just reached for that bottle and I knew it was against the law to do that, but I did it anyway. Man I felt good. I was off and running. This was eureka. This was it. It progressed. I started taking more and more and then I finally . . .

The key to a self-medicator's progressive drug use seemed to lie in their need to treat a wider and growing array of physical ailments. It got to the point that many pharmacists recognize that they were actively seeking out or inventing ailments to treat in themselves. As a 40-year-old female put it, "I had a symptom for everything I took."

Several other quotes illustrate this tendency to invent ailments. A 48-year-old female said,

I don't know if I had a headache, I like to think that I had some physical problem, but I couldn't swear to that to be honest. And it did something to me, there was magic there and it kind of calmed me down. So any way, all of that was going on in '76. You know when I said it made the pain go away I really meant that it made the pain go away temporary, postpone the pain. So all of that stuff kind of came along as baggage.

Or, as a 49-year-old male pharmacist put it.

Over a period of time took it at work, always justifying "oh I feel a cough coming on." Or then later on, it was "I was so mad, so frustrated." Well this [narcotic cough syrup] will calm me down like a drink would because I mean hell there was a lot of alcohol in it and it always did. Just instant tranquility. Most of the time I had pain or I anticipated the pain. "I know I'm going to have some pain, that's right."

Vocabularies of adjustment The above quotes illustrate that the pharmacists were aware of the wrongdoing associated with their drug related behaviors. Namely, they knew that they were not allowed to remove drugs from pharmacy stock or ingest drugs while on the job. However, much like the bad-intentioned abusers, the self-medicators developed

vocabularies of adjustment to offset their normative judgments. That is, they came up with a series of excuses or justifications that served as both *post hoc* rationalizations and *a priori* justifications for their behaviors.

It was easy for many of the good-intentioned self-medicators to claim that their drug use had a positive effect on their work skills. This was not such a stretch for them since they had originally begun using the drugs to remedy some constraining health problem.

Here, the data show that the pharmacist's strong passion to serve their patients was used to facilitate and excuse their drug use. This is illustrated in the following exchange that took place between myself (I) and a 44-year-old male pharmacist (P):

P: That's your self-medication. . . . At that particular time, I really prided myself in my work. I was able to handle a huge amount of work. And somewhere down the line, I guess it happened gradually, it was like I didn't have any [coworker] help, or at least I didn't have full-time help. I was doing probably the work that three normal people did, and it seemed that the narcotics would kind of take the edge off things, just kind of like a filter. And it allowed me to really bustle out the work when I had to.

I: So it was to enhance your abilities?

P: Yeah. Sometimes I would use it, and this was not all the time, it would start off every once in a while I would use it to enhance, or what I thought, to enhance my working abilities. And who knows, maybe it did for a while.

Similarly, a 43-year-old male pharmacist said,

It was Talwin [narcotic analgesic] all the time. The effect, the buzz, how I felt, just relaxed me. I didn't have any cares, you know. I thought I could work better, I thought I could talk better with the nurses and patients. I thought I could socialize better with it.

This theme was quite common among the good-intentioned self-medicators. They were adept at convincing themselves that their patients and employers needed them to work at a certain level. When their performance fell below this level, they turned to prescription medicines as a way of neutralizing whatever inhibiting force that was deemed responsible.

"I know too much to get in trouble" It is almost natural for a pharmacist to turn to prescription medicines as a way of treating physical ailments. After all, they have been exposed to years of pharmacy training that has reinforced the positive therapeutic potential of these medicines. They have dispensed the medicines to their patients and watched as they quickly produced positive results. They have read literature and drug inserts detailing the chemical composition and dramatic curative effects of the substances.

Pharmacists, more so than any other member of society, are keenly aware of how and why drugs work. There was strong evidence to suggest that the good-intentioned self-medicators were actively applying the years of drug related knowledge that they had acquired. In their eyes, it only made sense that they that they put their pharmacy knowledge to work on themselves. This application of knowledge can be seen in the comments of a 40-year-old female pharmacist.

So, in 1986 I was sent to the psychologist, and that was when I was forced to recognize that I had an alcohol problem. And I recognized that I had to do something. And in my brilliant analysis, I made a decision that since alcohol was a central nervous system depressant, the solution for me was to use a central nervous system stimulant. And that would solve my alcohol problem. And I chose the best stimulant that I had access to, and that was cocaine. And I started using cocaine in 1986. I never thought that it would progress. You never think it was going to get worse. I'm just going to use it occasionally.

Further evidence of this theme was offered by a 34-year-old male pharmacist:

Oh yeah. I should say that in 1989, I started taking Prozac for my obsessive compulsive disorder and the migraines. Well, I took it for my obsessive compulsive disorder and my symptoms improved like 70 to 80 percent. I prescribed that on my own, by the way. I did a lot of reading on the subject. I basically medicated myself. That also eliminated migraine headaches.

There are several similarities in the above two quotes. Notice how the pharmacists were quick to diagnose their ailment and identify the "proper" pharmacological agent that

would help remedy the situation. Moreover, note that they were quite confident that they would be able to confine or self-regulate their drug intake

Almost all of these individuals' used their standing as a pharmacist to reinforce the facade that their self-medication could not or would not progress. As a 40-year-old female self-medicator put it, "I'm a pharmacist, I know what I am doing." The interviewees did not think that a pharmacist could fall prey to drug abuse. They were sure that they were above such problems. Only stupid, naive street people come to abuse drugs. This phenomenon is illustrated in the remarks of a 35-year-old male pharmacist:

Yeah, it [addiction] can't happen to me because I know too much. We somehow think that knowledge is going to prevent it from happening to us when knowledge has nothing to do with it. It's like heart disease or anything else. It's like well I know about this so it can't happen to me. Now I teach. I developed a chemical dependency curriculum at our school. I do a clerkship in it and I don't think there one in the country except for mine in which I deal with some of that so that maybe they can personalize a little bit

A 39-year-old male pharmacist went so far as to say,

I mean, we know more than doctors, and we have all the package inserts. We have the knowledge, we know a lot of drugs, so what's the big deal?

Most of these good-intentioned self-medicators claimed that they had never been warned about the dangers of drugs, insisting that their training had only stressed the positive side of prescription medicines. For example, a 48-year-old male pharmacist said,

I never had anybody come right out and tell me that was probably unethical and illegal. Because they assumed that we knew that, but nobody ever said this is something that is not done

Left without guidance on the issue, they assumed that self-medication was appropriate behavior. To this end, a 39-year-old female asserted,

It's just part of it. It's just accepted because we know so much. I'm sure it's the same way the doctors do it. It wasn't a big stretch to start going "You know, I got a headache here, maybe I should try one of these Percocets."

Many pharmacists spoke about self-medication as if it were an entitlement that went along with being a pharmacist. Much like a butcher always has fresh meat or a car dealer always has a nice car, pharmacists will always have the best drugs. This theme is illustrated in an exchange that occurred between myself (I) and a 45-year-old male pharmacist (P).

P: Why take plain Aspirin or plain Tylenol, you got this, [Percoset] it works better, you know you don't have to struggle with it.

I: How are you rationalizing it?

P: I really believed that that's the license that I had to, as a pharmacist. I mean with all that stuff sitting there you know. I remember thinking at one point, oh my back was just killing me during that period of time. This narcotic pain reliever is sitting right there why should [I] suffer through back pain when I have this bottle of narcotics sitting here?

A parallel comment was made by a 44-year-old male pharmacist. He said,

I could say, "look, I've got this [ailment], I'm going to take some Doxycycline [antibiotic]. Yeah, whatever you want." It was like, I could take whatever I wanted. I could do it formal—I could make it a written prescription—or I could just take it. Most of the time I would make it a written prescription.

The above comments suggest that pharmacists often view self-medication as a fringe benefit of their job. They have an ailment, the drugs are present in abundance, they understand their effects on the body, so they ingest them on the spot.

Peer influences. It was not at all uncommon for the pharmacists to claim that they were encouraged to self-medicate by their pharmacy colleagues. When made aware of the individual's physical ailment, a senior pharmacist would simply instruct them to remedy the situation via pharmacy stock. This type of situation served to directly reinforce their initial self-medication behavior. For example, a 38-year-old male pharmacist described an incident that occurred soon after being introduced to his hospital supervisor.

I remember saying one time that I had a headache [He said] "Go take some Tylenol with Codeine elixir." I would never have done that on my own. He was my supervisor at the time, and I said, "if you think I should." He said, "that's what we do." I guess that started the ball rolling a little bit mentally.

This socialization function is portrayed in the following interview exchange between myself and a 50-year-old male pharmacist

P: At that particular time, I viewed them as only a doctor could get me a prescription for them. But I also had in the back of my mind, "Oh, so you got a headache, take a Darvocet [narcotic analgesic]. What the hell?"

I: Where did that come from?

P: That came from watching those other pharmacists do it.

A sign of the times--better living through chemistry In the most extreme cases, pharmacists described how their self-medication grew out of a relaxed approach to pharmacy practice that existed in the 1950s and 1960s. Much like their bad-intentioned misuser counterparts, some of the self-medicators spoke about the "golden age of pharmacy." They claimed that occasional self-medication was acceptable behavior at one time. Speaking about the 1950's, a 50-year-old male pharmacist said,

That [self-medication] was a little bit more relaxed at that time. Not just one person did it, but everybody did it. It wasn't so much that it was indiscriminate. These folks, they had prescriptions or they knew enough doctors that they could get prescriptions. I didn't think much about it at the time.

A 48-year-old male pharmacist expressed similar views about the pharmacy climate of the 1960s:

Back then, you would mentioned to somebody or they say "Guy, what the hells wrong with you? You're not doing too good today. You don't look good. Headache? or Nauseated? Here take this."

These comments describe a more permissive professional ethic that they claim was present during the 1950's and 1960's. These temporally-based explanations data offers further



evidence that profession wide practices or attitudes can and do shape the drug use behaviors of pharmacists. This issue will be expounded upon in later sections of this analysis.

In all, there were 27 pharmacists who fit into the category of good-intentioned self-medicators. These pharmacists entered their drug use careers as naive individuals. They were either counseled or convinced themselves that there was no harm in the occasional therapeutic use of prescription medicines. In every case, this belief was based in the assurance that pharmacists are somehow able to self-regulate their own drug use. This assumption turned out to be the source of false confidence and denial that allowed their drug use to significantly progress. Once their facade was broken, these pharmacists awoke to the reality that they were chemically dependent on one or more of the drugs that they so confidently had been using.

#### Consequences of Drug Use

The pharmacists described a number of personal and professional consequences that resulted from their drug use. For example, 12 of the respondents experienced several health problems. All of their drug related ailments were potentially life threatening (e.g., overdoses, bleeding ulcers, heart attacks, seizures). Another 10 respondents had attempted suicide. Ten pharmacists claimed that their drug use led to a divorce, and the majority cited problems with their friends, parents, and/or children.

Given the fact that most of the pharmacists were stealing and using drugs at work, it was not uncommon for them to experience job related problem as well. Specifically, 36 pharmacists claimed to have been apprehended by their employers. All but two of these cases resulted in the individual being fired. In most cases, the apprehension was accompanied by additional sanctions. For example, 14 of the pharmacists were arrested for

the theft of controlled substances. The bulk of the arrests resulted in fines or probation. However, three pharmacists did serve jail time.

Legal sanctions are not the only problem that drug using pharmacists can face. There is also the potential that the State Board of Pharmacy will take some form of action against their pharmacy license. There were a number of pharmacists who had to deal with these types of professional sanctions. Only 10 of the pharmacists had no action taken against their licenses. In most cases this was due to the fact that their drug use had never come to the attention of any formal authorities. These individuals voluntarily entered treatment and then either signed a treatment contract with a recovery network or entered a 12-step program.

There was a variety of actions taken against the licenses of the remaining 40 pharmacists. In four cases, their pharmacy licenses were permanently revoked. Another 12 pharmacists had their license suspended for a period of time. The remaining 24 persons were placed on probation by the State Board of Pharmacy. A probationary status was almost always accompanied by a treatment contract. Under these conditions, the State recovery network monitored the progress of the individual. They might be subject to after care requirements (attendance at 12-step meetings), random drug testing, and/or various other monitoring requirements. Most probationary periods lasted five years.

In the above pages, I have attempted to document the details of these pharmacists' illicit prescription drug use behaviors. In doing so, the discussion has touched on the ways in which numerous social factors (i.e., educational, occupational, and professional) influenced the onset and progression of the pharmacists' illicit prescription drug use behaviors. At this time, I will expand upon this focus and present further evidence to support my claim that being and becoming a pharmacist was a driving force behind the

drug use behaviors of these individuals. This discussion will be separated into three sections: educational influences, occupational influences, and professional influences.

### Educational Influences

#### The College Scene

Most pharmacists spend three to five years in pharmacy school. Their pharmacy school experiences play a central role in their professional development. Ironically, the interview data also suggests that the pharmacy school experience plays a significant role in the development of drug related attitudes and behaviors.

Many young Americans experience their first contact with drug and alcohol use while in college. Factors such as a lack of parental supervision, healthy drug supplies, high concentrations of young adults, a thriving social scene, and the experimental lifestyles of college students makes the university campus a likely place for drug and alcohol use to flourish. Moreover, those students who have previous experiences with drugs and alcohol often see their use increase or expand into new substances while at school.

On the surface, it might seem like the social life of a pharmacy student closely parallels that of the average college student. As such, one would expect similar substance use trends among pharmacy students. Several studies (Coleman et al., 1997; Krieler et al., 1994; McAuliffe et al., 1987; Miller et al., 1990; Szeinbach & Benjamin, 1990) have shown levels of overall drug and alcohol use among pharmacy students to be roughly the same or less than it is in other majors. However, there is an important trend that emerges from these studies. Namely, the researchers have found that, when compared to other students, pharmacists engage in significantly higher rates of prescription drug use.

The present study specifically set out to inquire into the nature and dynamics of pharmacists illicit use of prescription drugs. As expected, the inquiry found evidence of widespread prescription drug use in pharmacy school. All 23 of the pharmacists that I classified as bad-intentioned misusers claimed to have used prescription drugs while in school. For many of these individuals, pharmacy school marked their first real discovery of prescription medicines. When speaking about pharmacy school, they offered comments like the one made by a 40-year-old female pharmacist:

It's a blur. It was a party school and it was great fun. I am real bright. I breezed through school without devoting a lot of time to it. I discovered amphetamines and it was a wonderful way to party.

I mentioned above that pharmacy school offered the bad-intentioned misusers an opportunity to expand and fine tune their "better living through chemistry" attitude. In particular, they slowly tried out new drugs and began to decide which ones offered them the desired effects. By the end of pharmacy school, most of the bad-intentioned misusers had gotten to the point where they were stealing and using prescription drugs on a regular basis. This can be seen in the comments of a 42-year-old male misuser:

Drug use, yeah, drug use increased. I went back over my time line [drug use career] one time and figured out that I became what could be considered, at least in my mind, an amphetamine addict about 1968 or 69. Somewhere along in there. I started out using it to study . . . made me brighter, you know how that deal goes. All that stuff pumped me up. Then it became more of an everyday necessity just to get through the day. I liked it. I liked the way it made me feel. So I didn't only use it to study and stuff.

I have categorized 27 pharmacists under the heading of good-intentioned self-medicators. I have indicated that the majority of these individuals had limited experiences with controlled substances use prior to entering pharmacy practice (i.e., at the time they graduated from pharmacy school). The most common scenario saw the individual engaging in only experimental use of street drugs or alcohol prior to graduating from

college. Only eight of these individuals report using prescription drugs<sup>12</sup> before graduation. And in every case, this use was limited.

One does not have to look hard to see how pharmacy school impacts upon the prescription drug use of the bad-intentioned abusers--their drug use is readily apparent and can be traced directly to several conditions that are specific to their pharmacy school experiences. In the case of the good-intentioned self-medicators, however, the relationship is not as readily apparent. After all, their illicit use of prescription substances usually did not begin until after they left pharmacy school. Nonetheless, I submit that there are three important ways in which the pharmacy school experience helped contribute to prescription drug use in all of the pharmacists that I interviewed. 1) students were confronted with a new levels of access to prescription medicines; 2) students were confronted with pro-drug use attitudes and peer pressure; and 3) pharmacy education offered students a benign belief system favorable to the use of prescription medicines.

#### New-found Access to Prescription Medicines

Pharmacy school presents all individuals with a new-found access and familiarity to prescription medicines. For the bad-intentioned misusers, this access usually led to immediate drug use. For example, a 42-year-old male misuser said,

It's hard for me to place when I first tried a pharmaceutical. I think it would have been when I was in the late years of being a student. They [the internship site] had a room that had drawers just full of samples and no one had looked at these samples pretty much for a long time. There was Quaaludes [barbiturates] in there and different amphetamines. I think that's the main thing that interested me to try. So I sampled those, and I took a small amount of cocaine from the narcotic vault.

In the following quote, a 50-year-old male misuser describes the new-found access that came with his internship position:

Yeah, they had big jars, right. Dexamil number 1, number 2 [amphetamine], Dexedrine 5, 10 and 15 milligram [amphetamine], even Benzedrine

[amphetamine] tablets were still around. People used them for studying. I started using amphetamines when I was interning in '65. It was after my third year of pharmacy school. I got \$65 a week in that small hospital pharmacy. . . . I took amphetamines because I also worked nights in a gas station 1 or 2 nights a week occasionally. So I would, and I started taking amphetamines at that time. . . . The hospital I worked at really helped, like fed into my addiction. It was just like bins [full of drugs]. There was no accountability of anything

Routine access to prescription medicines seemed to lead to a certain level of acceptance toward prescription drug use. The misusers and self-medicators alike described how pharmacy students appeared to be unaffected by the use of prescription medicines. This can be seen in the following exchange between myself (I) and a 61-year-old male self-medicator:

I: How about prescription drugs?

P: Oh sure you used the uppers to make sure you could study.

I: Was that acceptable?

P: Oh yeah. That was acceptable.

The existence of tolerated limits was captured in an interaction between myself and a 39-year-old male misuser:

P: During exam week certain drugs were acceptable—ones that had the lower toxicities, the Ritalin, Methamphetamine in small doses, the Phenteramines [all amphetamines]. But then it got to be a game of try not to take it to pass. You know, it was more of a badge not to have to take amphetamines through an exam period.

I: So you couldn't be going overboard, there were kind of a limit?

P: By my senior year I was pretty overboard.

I: But I mean, within the fraternity?

P: At certain levels, yeah.

When asked about drug use in college, a 56-year-old male self-medicator replied,

If you had an exam to get through, you have a Biphedamine and a Preludin [amphetamines]. They were available at work. Nobody said anything about it. And as part of the ethics, that if you needed a pill, you could take it out of the stock bottle without even thinking about it, was part of the culture.

Many pharmacists described how relaxed attitudes and behaviors led to the trading of drugs between students. An internship position in an independent pharmacy would bring with it easy access to certain drugs (i.e., amphetamines or benzodiazepines). Conversely, an interning position in a hospital setting would offer little or no access to these drugs. Yet, this same hospital position would present a student with an opportunity to steal a different set of drugs (i.e., narcotic analgesics). Given this situation, pharmacy students would stockpile the drugs that they had ready access to and trade them for other drug types. This practice was captured in an exchange between myself and a 35-year-old male misuser

I: Tell me more about this swapping concept. What, like everyone kind of had their own little stash?

P: Yeah, and you knew what other people wanted, needed, liked, whatever. And they knew what you liked. Or maybe their pharmacy was [different]. Like for instance I worked in a hospital pharmacy as a student. We wouldn't have amphetamine-like drugs, but a retail store did. We would have large quantities of nonsteriodals or muscle relaxant type drugs. They might not. They'd have them, but they wouldn't have bottles of thousands like we did.

I: So they would be easily missed?

P: Yeah. And so like I would get them, particularly for two individuals . . . Motrin. And they would get me schedule 3 things that weren't counted that closely in their pharmacies. I think they could be I think 15% off, 10% off something like that. So if they had 1000 of them, 100 so what?

I: So be it? So that was kind of, it was accepted behavior among the students, or was it just a select group that knew about it?

P: I have a feeling that a lot of that went on. It wasn't something that I talked to outside that I kind of did that with, my 3 or 4 friends. Mainly my 3 friends

### Socially Accepted Drug Use

The interviews revealed that pro-drug use attitudes often resulted in direct socialization with student peers. Older pharmacy students often encouraged their younger peers to take advantage of their new found position and opportunity. This trend can be seen in the comments of a 34-year-old male self-medicator:

I got a bottle of Dexedrine [amphetamine] and I would take them to study, maybe just around finals or something like that. I didn't use it to get high. My first experience with Dexedrine was when I was a freshman. Here I am a freshman, now thinking back now, a freshman in college--17 years old because I was a young freshman. I go to take my finals around December--it might have been a mid-term. A guy comes in, one of these guy's older than me. "Why don't you speed before the exam?" I was naive at the time. He gave me a 15mg Dexedrine--taught me how to do an all nighter. "Here's the sodium bicarb." I don't know a damn thing about it. You know, it was never around my house

This socialization function is also seen in an exchange that occurred between myself and a 37-year-old male self-medicator:

I: In pharmacy school, that last year, you started partying with the guys in pharmacy school?

P: Mmm hmm.

I: And they were the ones that introduced you to pharmaceuticals?

P: They were the ones who introduced me to the pharmaceuticals, yes.

I: And where were they getting them?

P: From their work.

I: And you quickly learned from them that . . .

P: I guess that helped validate that it was okay to do that. I was maybe doing it, I don't have very specific recollections about the antibiotics that we talked about, but when you see all your peers doing it, that helps validate it. At least it did for me. If they do it, it must be okay.



### Pharmacy Fraternities

Pharmacy fraternities were another popular venue for drug use socialization.<sup>13</sup> Given their pro-drug use reputations, the bad-intentioned misusers often described how they quickly sought out membership. However, the self-medicators were also aware of the drug use that often occurred in pharmacy fraternities. Consider the following exchange that occurred between myself (I) and a 27-year-old male bad-intentioned misuser (P):

I: Did you hang out with other pharmacy students?

P: Yeah, a bunch of them in my fraternity. That's a bunch of group of guys that either, maybe they're not addicts like me. Maybe they could turn it off, cause I haven't seen any of them. But there were a lot of drugs in that house. Let's put it that way.

I: Where would they come from?

P: They came from the stores. They were all skimming from the stores, hospitals, wherever.

I: Basically everyone in the fraternity was using?

P: Yeah. There were a couple of guys that didn't work out. I can't say everybody. But I'd say more than 50%.

I: So it was accepted behavior?

P: Absolutely. You'd go looking around for Ionamin [amphetamine] if you had a test. "Who's got the Ionamin?" "Oh, I think Joe's got them upstairs." "Uh, okay." It would be like commonplace. Literally commonplace. You don't ask for a pencil, you ask for Ionamin.

The pro-drug use norms of the pharmacy fraternity can also be seen in an exchange that I had with a 46-year-old male misuser:

I: So it spanned everything from street pot too?

P: Well, yeah. Not too much street drugs because we had free pharmaceuticals, why should we pay for the street stuff? The street stuff was pretty much just marijuana, that's all I really did.

I: Were there any limits?

P: I limited myself

I: I mean, were like the narcotics off limits?

P: No, they weren't off limits.

I: Did you use any narcotics?

P: Yeah, I started using narcotics my second year. First year was pretty much benzodiazepines and downs--"ludes" [Quaaludes a depressant]. Then the second year I tried coke, Percodan, Percoset and started Dilaudid . . . started in on the narcotics. Downs were my drug of choice.

I: So you are using on the basis of what, peer approval?

P: Yeah, everybody was doing it and I wanted to be part of, so I did it too.

I: Was there any limits on how much use was accepted?

P: You couldn't shoot up in the house. That was off limits.

In the best case scenario, pharmacy fraternities presented the student with access to heavy drinking and recreational drug use. In the worst case scenario, fledgling pharmacists were introduced to a darker, more involved form of prescription drug use. In any event, the fraternities appeared to contribute to students' access to, and involvements in, prescription drug use.

#### Acquiring A Benign Belief System Toward Prescription Medicines

I submit that pharmacy students emerge from college with a benign belief system toward prescription medicines. This belief system can be directly linked to a clear educational paradox that exists in pharmacy school. From the onset of the educational process, pharmacy students are inundated with information about the positive therapeutic effects of prescription medicines. They are presented with a wealth of technical material outlining the intricate details of prescription medicines. For example, they learn the active chemical agents in each drug type. Also, they learn all of the pharmacology associated with the drugs. Finally, they learn how each drug type interacts with other drug types.

Given this repeated reinforcement, most students were mesmerized by the tools of their trade when they emerge from pharmacy school. In essence, pharmacy school instilled them with an certain professional overconfidence toward the drugs. This is illustrated in the comments of a 44-year-old male pharmacist

Yeah, what we learned in school back in the '70s, was yes this was indeed a problem for society, isn't it fortunate that pharmacy doesn't have it. We know too much. We know what these drugs will do, so obviously it could never happen to a pharmacist.

Overconfidence alone might not be a problem. However, this overconfidence is only one facet of the educational paradox that I have uncovered. The other facet is embedded in the pharmacy school curriculum. The interview data suggested that pharmacy school offers students very limited training in the dangers of addiction. For example, when asked about his addiction education, one pharmacist offered up the following types of responses:

"I had no [drug abuse] education. I was a drug expert and new nothing about the substances."

"It was just that junkies shoot heroin."

"Never did we ever have a class like addiction. Never did anyone ever come in."

"Absolutely not. That was not even considered. That never came up."

"That was the sum total of pharmacy education on substance abuse. 'Keep your hands off the stuff, ha, ha, ha.' That's it, that's all I ever learned."

What training they did receive was usually quite technical and rudimentary. For each drug type, they were made aware of the addiction potential ratings that are contained in the Controlled Substance Act of 1970. They were provided general information about the "signs of abuse" that accompanied various controlled substances. This is not to say that neophyte pharmacists are not exposed to the dangers of drugs. On the contrary, faculty members seem to stress that people can and do get addicted to prescription

medicines. However, the message is conveyed at a very abstract level. Rarely are they told that pharmacists can get addicted to prescription medicines. This view can be seen in the comments of a 59-year-old male pharmacist:

In school it was cold, clinical--"yes, this can be habit forming and addictive." But as far as the addiction process described in detail, you know, the mental and the physical part of it and how those interact, and all those self-esteem issues, that's totally lost in it. It's just totally clinical. . . . They did touch on it, actually, but from a legal and a clinical standpoint. If you do this, you will get in trouble, here are the penalties, this is what they'll do to you. This class of drugs have this addiction potential

The abstract nature of the addiction training is also expressed in the following exchange between myself (I) and a 46-year-old male pharmacist (P):

I: Do you think that they teach you everything that you need to know about substance abuse?

P: Substances of abuse? Absolutely not.

I: Did they teach you anything? I guess would be the better question?

P: Let me tell you, we went on rounds to [a hospital] which was the alcoholic ward. And we saw society's [problem], we learned how to manage it, we learned about drugs that we used for DTs [delirium tremors] and that was about it. And I think that many classes even after that received very little more than that, basic stuff where as this is addiction and how to treat it. Not even that, these are the physical effects of alcoholism, etc. And this is the medical management of those physical effects. No treatment of the disease at all, ever.

As such, pharmacy students are caught in a troubling paradox. On one hand, they are inundated with information and instruction that emphasizes the positive aspects of prescription medicines. At the same time, very little effort is focused on cautioning the students about the darker dangers of these medicines. Given this situation, pharmacists are free to develop overconfident and ignorant attitudes toward drug use. A number of pharmacists spoke candidly about how this combined naivete and invincibility contributed to their prescription drug use. For example, a 34-year-old male pharmacist said,

They talked about abuse potential but I never realized that certain people could become addicted to something and that certain could not become addicted to something. I thought that when they talked about abuse and habit forming that anybody could become addicted, as long as you took it long enough at a high enough dosage, that everybody would become addicted. You know, your body would become addicted to it or something.

Speaking about his drug abuse, a 27-year-old male pharmacist commented,

It [addiction] never really registered. To me, it was just having a good time. That's all I was doing was just having a good time. I wasn't hurting anybody. That's how I relaxed. I never even thought of the addiction. It never even crossed my mind. It sounds kind of crazy. No it is. It is kind of crazy, but it was just like no one brought the subject up. I guess that's a weird way of putting it.

Some pharmacists describe how they took their overconfidence to the extreme, actively seeking to apply their knowledge of drugs. For these individuals, learning about the drugs was not enough, they wanted to experience their positive effects. In the following interview excerpt, a 48-year-old male pharmacist tries to convey the way he approached drug use:

I used them for, to give myself the whole realm of healing experience. To control my body, to have the ups and the downs, to feel—I thought I could chemically feel, do think whatever I wanted to if I learned enough about these drugs and used them. Actually I sat in classes with a couple of classmates where they would be going through a group of drugs, like a say a certain class of muscle relaxants, skeletal muscle relaxants, and they would talk about the mechanism of pharmacology and then they would start mentioning different side effects, like drowsiness, sedation and some patients reports euphoria, and at a high enough dose hallucinations and everything. Well, hell, that got highlighted in yellow. And then that night, one of us, wherever we worked, like me in my Dad's store, would take some and then we would meet in a bar at 10:00 or in somebody's house and we would do it together.

Several examples of this "applied" or "experimental" drug use were also offered in my original discussions of bad-intentioned misusers. These quotes offer the most stark examples of how pharmacists succumb to the benign belief system that is fostered via the pharmacy school experience. For them, the educational paradox becomes a painful drug

filled reality. Left without any real inhibitions toward drug use, they feel free to wade into a drug use habit that becomes progressively worse

My analysis yielded widespread evidence of an educational paradox. Exposure to this paradox seems to nourish a naive belief system in the young pharmacist. The situation is further exacerbated by the presence of other educationally-based factors outlined above. For example, a naive belief system can flourish in an environment that included easy access to prescription medication and relaxed attitudes toward occasional drug use. Similarly, a pharmacy student can more readily apply positive drug norms when he/she has easy access to prescription medicines.

With all of the social reinforcements for drug use that exist in college, one might think that graduation would serve as a healthy new start for pharmacists. This does not appear to be the case. My analysis revealed numerous factors associated with the occupational experiences of practicing pharmacists that further exacerbated the situation. In short, the work environment also seems to contribute to illicit prescription drug use behaviors.

### Occupational Influences

#### Mentoring/Modeling Relationships

There is a important occupational socialization process that exists within the pharmacy profession. Nowhere is this more evident than among new pharmacy practitioners. When a young pharmacist first enters into the work force, it is common practice for them to be assigned to a pharmacy mentor. This early work relationship plays an important role in the long term attitudes, beliefs, and practices of the young pharmacist.

My interviews revealed that these mentoring relationships can often erode young pharmacists' inhibitions about prescription drug use. For example, 16 pharmacists worked

under a mentor who openly practiced self-medication. This situation is illustrated by the comments of a 48-year-old male pharmacist:

Well when I first started I had a store manager that was a pharmacist. He used to come by every morning and lay his dollar on the counter and take his 4 Dexedrines [amphetamine] out of the jar, so obviously I don't think anything is wrong with that

In many cases, the mentors would take the situation a step further and encouraged the young pharmacists to use prescription drugs. For instance, in the following quote, a 38-year-old female pharmacist describes how, one day, her mentor held a mini-seminar in self-medication:

He said, "you should know how your medication tastes. You never know. You might need to know." And he lined up--there were three or four of us--and then he lined up all of these cups and poured out all these damn cough syrups. And I drank some from each of them. And I got a buzz, and I thought it was fantastic. I must have ended up having four or five teaspoons of cough syrup. He poured out so many different ones

In every case, exposure to a drug using mentor had a negative effect on the young pharmacist. The nature of the effect seemed to depend upon the individual's views of drug use at the time. If the young pharmacist was already actively using drugs (i.e., bad-intentioned misuser), they interpreted their mentor's behaviors as a green light for further use. This trend is clearly seen in the following interview exchange between myself (I) and a 27-year-old male misuser (P):

P: Work was pretty good. I was starting to get into my addiction at that point. The more times I went to work, the more times I got drugs. I'd come out with a fist full of whatever I wanted at that point.

I: It sounds like you pretty much teaching yourself at that point?

P: Not really. I had two people there. One who was a pharmacist. She was real good at what she did, but she, I thought she would be in the [recovery] program by now, but I don't think she is. She was taking Ritalin [amphetamine], crushing Ritalin and snorting them right there in the pharmacy. I guess she taught me a lot.

Further evidence of this trend is offered in an exchange between myself (I) and a 44-year-old male misuser (P).

P: You would just come into work and tell someone that you had a test. He would say "what, a test, well you might as well take some of this [amphetamine]." So that was that.

I: But you came in using pretty heavily, so you didn't need much of that rationalization. You know, them saying "here, take it to study." You were going to take it anyway so it was just, gee, thanks for giving it to me so I don't have to take it.

P: No, it wasn't just that I had access to it. No because, let's say, my preceptor, the pharmacist who was my preceptor when I was in school, he was doing it. I saw him doing it. Here he is going through a divorce and so he was self-medicating himself. This was the guy who had taught me everything I knew. So I just thought I guess when you're a pharmacist, I'm sure it was more than that, but that's the way that I did it my brain.

One can see from these quotes that the bad-intentioned misusers had little problem using their mentor's behaviors to justify their own further use.

Exposure to a drug using mentor seemed to have a more delayed effect on the good-intentioned self-medicators. For example, consider the following exchange that occurred between myself (I) and a 39-year-old male self-medicator (P):

P: Actually my amphetamine use was I think initially so [low] that I could handle [work], so I could keep up you know. At least that's what I thought I remembered the day that my preceptor gave me my first shot of amphetamine. Nice friend.

I: Good mentor.

P: Yeah, nice mentor--taught me everything I know. But actually I remember being really, really tired. Just dragging and this fellow gave me a shot of amphetamine and boy it was like superman you know, just all of a sudden I could handle it. It tied right in with my beliefs about myself: that I was inadequate and I couldn't do as well as anybody else and boy that was the wrong message for me.

This interview excerpt illustrates the long-term reinforcement potential of these early work experiences. While the individual did not immediately emulate the drug use of his mentor, it



certainly resurfaced as a form of encouragement at a later date. This trend can also be seen in the comments of a 45-year-old male self-medicator

P: I thought, well you know, Gary and Phil at [the] Hospital gave me these and so obviously that is a validation to use them. Yeah, they probably use them, it's okay. This must be what pharmacists and pharmacists do--strictly recreational, but you know helpful too. . . . That was really my first indication that it was okay to self-medicate. Because these two guys, I really respected them and I still do today.

### The Attitudes and Behaviors of Pharmacy Coworkers--Peer Influence

The early mentoring years were not the only time period in which pharmacists were presented with opportunities to learn bad habits from their coworkers. Twenty-four pharmacists claimed that they had worked with at least one drug using pharmacy peer. For the self-medicators, these experiences often preceded their own drug use. For example, in the following quote, a 44-year-old male pharmacist describes how his boss (the owner of the store) was in a drug-for-sex scam

He was trading drugs for sex with all these little girls in town. He'd have sex with all these sweet young things in town and give them uppers and downers he carried around. I never saw him when he didn't have [some]. I wondered what he did that was so big with Kodak because Kodak gave him everything. But he had a Kodak bag. In that bag was uppers, downers, in betweeners

Similarly, a 38-year-old male pharmacist described how a close friend and coworker was fired for his involvements in drug use/theft.

He was a really talented man, really compassionate, caring man, but I don't think he ever got the [State recovery] program. He got caught there passing some phony prescriptions or something

Given that many of the self-medicators did not begin using drugs until later in their careers, it was often possible for later employment experiences to have significant impacts upon their decisions to use. In most cases, this learning process was quite subtle - they

would observe self-medication practices in their peers and then privately imitate their behaviors.

In some cases, however, self-medicators described how their initial drug use was a direct and immediate result of a peer's encouragements. This was the case with a 38-year-old male pharmacist:

I: So how did it all start?

P: It was 1968. I was working with a pharmacist there who was sort of lax about controlled substances. I told him I was having an awful hard time sleeping and I really hadn't taken any drugs prior to that time. I had used alcohol a little bit and he, we had a bottle of expired sleeping pills and I don't remember what they were. He said, "Oh here take this." So that started me taking sleeping pills.

While this individual went on to explain that he kept his future drug use from his peers, he certainly attributed the initial usage to his encouragement.

The bad-intentioned misusers were not nearly as shy as the self-medicators. When they found out about a drug using peer, they simply began to party with the individual. This can be seen in the following two interview exchanges. The first is with a 39-year-old female pharmacist:

P: I would party with some of the people I worked with, so some of those people were aware. They weren't, most of them at least weren't defrauding.

I: So when you say "party," you mean . . .

P: Yeah, we'd get high with them. Go out drinking or smoke pot, sometimes share the [pharmaceutical] coke. Whatever.

The second exchange is with a 42-year-old male pharmacist:

P: I had a good experience working there, worked with some good people, worked with some other guys who were going to school, basically. A lot of them were doing the same thing.

I: What do you mean?

P: Taking stuff, taking drugs. . . It was never anything major, maybe some Quaaludes [barbiturates] or some amphetamines

In some cases, the bad-intentioned misusers had occasion to learn some new drug use or drug theft trick from their drug using pharmacy coworker. This is illustrated by the remarks of a 47-year-old male misuser:

P: There was one pharmacist that I worked with. He was more into the speed and stuff like that. I was into Dilaudid [narcotic analgesic], but he taught me a few tricks.

I: Such as?

P: I don't know if you are familiar with Biphetamine caps [amphetamine], those black beauties. Well, he would tell me how that they were expired and they didn't make them anymore. They were still good. So I'd go into the bottle and open them up and dump out the contents and then fill them up with lactose, put them back in the bottle. They were still accounted for. Yeah, so he taught me about that trick. He also taught me that the hangover cure would be Fiorinol [narcotic analgesic], Bentil, and something else, I forget. You crushed them all in a mortar and pestle and made capsules out of them. I was like, cool . . . experiment, playing with pharmacy. I'm really doing it.

### Occupational Norms

Fifteen of the pharmacists that I interviewed recall working in an environment with permissive attitudes toward drug use and drug theft. In particular, they explained that self-medication via pharmacy stock was either accepted or encouraged. Pharmacists offered up comments like those of a 27-year-old male.

Everyone was doing it. At least, it seemed like everyone was doing it.  
Everyone that I associated with was doing it.

These job norms were similar to the restricted drug use norms that existed in pharmacy school. The only difference was that while there the job norms only permitted therapeutic drug use, however, pharmacy school norms were more tolerant of recreational usage. This trend is illustrated in the following interview excerpts. For example, a 38-year-old male pharmacist said,

I talked to one of the guys and said listen I have a terrible headache, he goes well Mike take whatever you want. Well I already had that idea. But it was a pharmacist that knew me, he goes "oh yeah, go ahead, just as long as it was not a schedule 2."

Similarly, this acceptance of self-medication is expressed in the following comments of a 39-year-old male pharmacist:

I: Did you see any kind of self-medication among pharmacists?

P: Oh yeah, a lot of self-medication.

I: How was that viewed, acceptable?

P: Uh huh. I mean, we know more than doctors, and we have all the package inserts, we have the knowledge, we know a lot of drugs, so what's the big deal? But don't mess with Schedule IIs. I mean, those have to be counted one at a time.

In most of these 15 cases, the pharmacist explained how they used these job norms to reinforce their own continued and progressive drug use. For example, speaking about job norms, a 50-year-old male pharmacist said,

P: That opened the door and it was that permission of saying yeah, we do this kind of thing all the time, not necessarily with narcotics, but you know, if you've got the flu or got a cold, you take some antibiotics.

I: So it's then when the idea of self-medicating started?

P: Right, it was reinforced. Because I had always seen it being done.

This pharmacist went on to explain that he was soon able to justify using narcotics as well; he simply convinced himself that they were a more effective method of treating the physical pains of work.

In sum, the interview data reveal several points in which coworker behaviors appear to contribute to the interviewees drug use involvement. In many cases, the learning process is subtle. However, in other cases, there is clear and convincing evidence that shows a direct relationship between coworker drug use and personal drug use. Moreover, there is

considerable evidence to suggest the pharmacists were able to manipulate existing attitudes toward self-medication in a way that justified their own brand of extensive self-medication (i.e., abuse).

#### Employer's Policies Toward Drug Use

To this point, my discussion of occupational influences has focused on the ways in which the behaviors or attitudes of coworkers contribute to pharmacists' drug use. However, coworkers socialization is not the only problem that these pharmacists faced. The policies and procedures of the pharmacy employer were also shown to be a factor. The respondents described how pharmacy employers often showed very little interest in educating their employees about the topic of substance abuse. Most employers simply presented new employees with a standard "drug-free workplace" agreement and had them sign it. From that point, they were on their own. There were very few exceptions where pharmacists recall any formal training on the any issue related to substance abuse. For example, there was no training in early identification. There was no training on workplace intervention. Much like college, the workplace was void of any instruction on the psychological aspects of addiction.

The pharmacists described a work environment in which they were simply expected to know better than to use drugs. On the surface, this may not seem like an unreasonable expectation. However, this expectation must be buttressed against a pharmacist's relationship with prescription drugs. Once a pharmacist becomes a full time member of the professional work force, they obtained increased access to and an understanding of prescription drugs and their accompanying dispensing procedures. This situation builds upon the educational paradox described above and lends itself to further rationalization on

the part of the pharmacist. Specifically, they appear to become more confident in the useful nature of drugs and hence continue to downplay their dangerous potentials

There was evidence that occupational factors continued to contribute to the pharmacist's drug use even after he/she had begun using. For example, the pharmacists described how their employers presented them with very few ways out of their problem. If treatment solutions were available, there was very little effort to raise awareness about their existence. At the same time, many pharmacy employers conveyed a very strong "zero tolerance" attitude toward drug use and drug theft. Left without an viable solution, the pharmacists simply chose to continue into their downward spiral of addiction. Pharmacists repeatedly offered comments like this 38-year-old female:

I felt like I was the only pharmacist who had this problem, you know? I had no idea at all where to turn. I figured if I turned myself in or came forward I would be fired.

Further evidence of this trend can be seen in the remarks of a 62-year-old male pharmacist:

Hell, for all I knew that would be the end of my career. And I wasn't about to let them pull the plug on all of that work . . . no way.

Both of these quotes illustrate how a perceived lack of alternatives contributed to the pharmacists' continued drug use. Ironically, many pharmacists described how the seemingly uncaring posture of their employers actually led them to steal more.

### Occupational Role Strain

The complex nature of pharmacy work often requires individuals to serve as both businessperson and health care provider. Several scholars have argued that this occupational role strain has an effect on pharmacists' involvements in deviant behavior. In

particular, Quinney (1963) found that business oriented pharmacists were more prone to prescription violations than were the more professional (health care) oriented pharmacists.

During the course of the interviews, I explored the relationship between occupational role strain and pharmacists' drug use behaviors. Almost all of the pharmacists acknowledged that they were aware of this role strain and that had experienced it throughout their career. They offered comments like this 48-year-old male pharmacist:

I was frustrated. I remember the feeling that what we learned in college was not applicable to the retail pharmacy where I was. Because what you needed to do out there was learn pharmacoeconomics and people skills and all that kind of stuff. And nobody ever taught us that kind of stuff. I mean they did, but it wasn't down to earth type of stuff. It was all theoretical and patient oriented. Then finally I got into the kind of job that I wish I had had all along where we dealt with people on a one-to-one basis all the time. It wasn't, you know, put them in the bottle and throw it over the counter and do the pharmacist Jones type of stuff. You know, we do a lot of consulting work and we do a lot of nursing home work, so it's not 9 to 5 all the time behind the same counter.

Similarly, a 39-year-old male pharmacist said,

I liked my clinic position. I liked [that position] because I was dealing with the doctors and I had access to the chart, I knew more about my patients. The patients came right to me and I could talk to them. It was a very intimate work situation. The retail, I don't know . . . I always felt trapped behind that counter. I couldn't get away from it. It's like, when you go to a fair and you see the little ducks going across and you shoot the BB gun. Well, it's kind of like how I felt because there is always that next customer right behind him, same gripe, same complaint you know. It used to get to me. The business aspect really bothered me. I don't deal well with that, although I understand business quite well. I have an associates degree in accounting but I don't necessarily like to practice it.

The data clearly show that some pharmacists prefer the health care side of pharmacy while others prefer the business aspects of the profession. Thirty-two of the pharmacists preferred a predominantly health care oriented workplace while 17 enjoyed

the business side of pharmacy work. Those who preferred an emphasis on health care offered comments like this 48-year-old male pharmacist:

I can get pretty disenchanted with pharmacy in general. Sometimes I don't feel I'm using all my skills that I have learned and I'm not using all the intelligence that I have learned. And I think that I could be of better use other places. It gets to the point where I'm doing repetitive work--like pour, count, lick and stick. That takes up about 80 to 90% of my time. The rest of the time . . . I get to talk to the customers, to the patients. Especially when I get to talk to somebody whose been going to pharmacies for 20 or 30 odd years and no one's taken the time to explain things to them. Fortunately in my position, I am one of the 6 pharmacists there and I'm the one who everybody points to when he has a question. Because I am the best at it and it's what I really enjoy

Conversely, the preference of a predominantly business oriented job role can be seen in the comments of a 39-year-old male pharmacist:

I have been doing all this stuff for so long you know, count pills, go to the bank, hire and fire people, do the media [coupons], end caps. You know, I guess I have grown to like it

In almost every case, the pharmacists voiced displeasure if a job environment did not allow them to fulfill their desired roles. Given the growing emphasis on the business side of pharmacy, it was usually the health care oriented pharmacists that experienced the most role strain. However, there was very little indication that this displeasure was directly linked to the onset or progression of the drug use situation for either group of pharmacists

While the data did not support the same type of job role/deviance relationship that Quinney (1963) found, this line of inquiry did yield an interesting trend. In particular, there was a clear relationship between an individual's preferred job role (i.e., business emphasis vs. health care emphasis) and their drug use classification (i.e., bad-intentioned misuser vs. good-intentioned self-medicator). The nature of this relationship is expressed in Table 2



Table 2. Relationship Between the Respondent's Preferred Job Role and Their Drug Use Classification (N = 50)

	Business Emphasis	Healthcare Emphasis	Total
Bad-intentioned Abuser	64.7 (11)	35.3 (6)	100.0 (17)
Good-intentioned Self-medicator	36.4 (12)	63.6 (21)	100.0 (33)

The data in Table 2 show that a significant majority (11 of 17) of the business oriented pharmacists were classified as bad-intentioned misusers. Conversely, most of the health care oriented respondents (21 of 33) were classified as good-intentioned misusers. This latter relationship offers further support for my assertion that self-medicators have a tendency to justify their use by appealing to their need to meet the demands of their patients. At the same time, the disproportionate number of business oriented misusers helps substantiate my conclusion that these pharmacists are not much concerned over patient care or professional responsibility. For example, consider the comments of a 40-year-old female misuser:

I would be love to be able to report that I had a healthy respect for the drugs but I didn't. And I don't know why not.

For the misuser, drug use became the central focus of their lives. Their pharmacy work, on the other hand, was a way to broaden their understanding and access to prescription medicines. This view is evidenced in the comments of a 48-year-old male misuser:

I: Did your recovery [from drug abuse] change the way you did pharmacy work?

P: Oh yeah. I became more professional. I mean this is a silly term coming out of my mouth, but I became more caring about people I dealt with,

number one. I became very aware of what proper and what wasn't proper, things like that

My analysis has revealed numerous ways in which the pharmacy work setting influenced the drug use behaviors of these 50 recovering pharmacists. In many cases, pharmacists described how their initial or progressive drug use was encouraged by the relaxed behaviors or attitudes of their coworkers. However, coworkers were not alone in their drug use facilitation function. Pharmacists described a noticeable void in training and concern on the part of their pharmacy employers. Instead of presenting pharmacists with education and training in the area of drug use and drug theft, employers chose to adopt and disseminate a cold, Draconian, punitive posture. In short, they emphasized zero tolerance for pharmacists' drug related misbehaviors.

### Professional Influences

Educational and occupational experiences are not the only forces that shape the professional identity of a pharmacist. They are also significantly affected by the attitudes and beliefs of the larger pharmacy profession. In fact, a significant amount of the pharmacy educational and occupational experiences are centered around the abstract task of maintaining a process of professional socialization. For example, a great deal of energy is focused on issues such as pharmacy ethics, professional competence, and the adherence to the policies and procedures of the many governing bodies (local, State, and Federal) of the pharmacy profession. Over the course of an individual's pharmacy career, they are constantly be reminded of their professional responsibilities. They are directed to behave in a certain manner. Pharmacists are expected to represent, preserve, and pass on a certain

image and identity of the larger pharmacy profession. Many pharmacists described how they felt compelled to conform to these professional standards. Elements of this socialization process can be seen in the comments of a 33-year-old male pharmacist:

A lot of it [professional conformity] was from training. For example, a little bit of pharmacy school was almost like polishing or finishing school. There was one particular day a week in our fourth year where we were supposed to dress a certain way and look a certain way and we were graded as much on our appearance. We were graded on our appearance and the appearance of the products we produced. It was a crisp shirt and tie and lab jacket for the men and appropriate dress for the women. We were definitely coached about that kind of thing and graded for it.

Further evidence of this trend can be seen in the comments of a 37-year-old female pharmacist:

We were taught that you had to be very responsible. We were taught the way to go about it in a professional way. . . . Once I got into the workplace, I wanted to do it all right so no cutting corners, no. You didn't cut corners because that one corner that you cut somebody is going to be waiting around that corner for you. So no, it wasn't, no, I don't ever remember getting flak at any way because I was always very paranoid about my license.

Throughout the early parts of this dissertation, I have argued that aspects of this abstract professional socialization process can and do impact upon pharmacists' attitudes and behaviors specific to the issue of illicit prescription drug use. My analysis of the interview data offer several examples to support this assertion.

### Paradox of Familiarity

The pharmacists that I interviewed were very proud of their professional status. Moreover, they claimed that they had held these sentiments throughout their pharmacy careers. They described a certain elevated status that went along with their position as a

pharmacists. They repeatedly spoke about the way in which being a pharmacist produced an elevated self-image. For example, a 40-year-old female pharmacist said,

I loved my job. My job was me. When someone asked me, "Who are you," and I still to this day, throw the fact . . . when they ask me what I do, and I say "I'm a pharmacist." And if we get to talking about what I've done, I always make sure that I include in my career achievements at [a hospital]. I did very well there, and I did a lot for that pharmacy . . . I loved it . . . and the job was me. I was a pharmacist. I wasn't a person. I wasn't a mother. I was a pharmacist.

The pharmacists described a sense of satisfaction and accomplishment that was attached to helping others via their specialized knowledge of prescription medicines

Without exception, these pharmacists saw themselves as drug experts. They argued that pharmacists, above all members of society, were best prepared to dispense and counsel patients about prescription the nature and dynamics of prescription drugs. For example, a 33-year-old male pharmacist said,

It was all like professionalism, you are the guardian of their health. The doctor might now know what they're doing, it's your idea to make sure, that the right meds are used. We are supposed to question the doctors, in a good way. We say "hey look, don't come off arrogant, but hey doc why are you doing this?"

Notice how this individual emphasizes the important role that pharmacists play an integral role in the larger health care delivery system. This was a common sentiment offered by the respondents.

The naive observer might think that a strong professional identity and extensive education and exposure to the effects of prescription drugs would be the perfect deterrent against their abuse. Surprisingly, this was not the case! Over and over again, pharmacists described how their intimate familiarity with prescription medicines was a contributing factor behind their drug use. In particular, the interview data show that the professional

socialization process exposes pharmacists to a dangerous combination of access and professional reinforcement. In effect, this ongoing professional socialization allows the "paradox of education" described above to slowly mature into a larger and more costly "paradox of familiarity." The aspects of this paradox of familiarity are described below.

Part of the paradox is rooted in a pharmacist's constant exposure to prescription drugs. Once a pharmacist leaves college and enters into practice their every workday is marked with repeated contact with a host of prescription medicines. This routinized exposure to the drugs effectively erodes the individual's respect for the dangers of the drugs. For example, a 41-year-old male pharmacist commented,

I: You say that work desensitized you further. How so?

P: Because of pharmacy school, I didn't realize the dangers of the chemicals, and I see so many prescriptions for Valium [benzodiazepine] and Codeine [narcotic analgesic] . . . that over a period of years it seemed okay. I wasn't smoking marijuana, I wasn't doing anti-Baptist alcohol, so I was okay.

This pattern is also seen in the remarks of a 52-year-old female pharmacist:

Well, the accessibility helped. I mean, I used the profession because you're accessible to all these drugs. And I mean, I know. I'm a trained pharmacist. I know what can make you feel good, and what can make you feel quiet, and all the different kinds of drugs, so my drug knowledge helped me pick the best one for me.

The situation is exacerbated by the multi-front, one-sided marketing offensive that pharmacists are exposed to throughout their years of pharmacy practice. Pharmacists are constantly being told about the powerful, positive therapeutic effects of the prescription medicines which they dispense. This reinforcement comes from a variety of sources such as patient consultations, coworker discussions, professional organizations, and interactions

with representatives of the pharmaceutical industry. A few examples of this positive reinforcement are offered below. A 44-year-old male pharmacist stated:

P: That's the way I grew up . . . if there's a problem, if you have a headache, you can take a pill. If there's a stomach ache you can take a pill. There was a pill for everything.

I: Like "better living through chemistry?"

P: I think that that's right.

I: Did you buy into that?

P: I think I definitely did. If there was something wrong, regardless if it was, one of my kids or whoever it was, we made something that could take of anything you had. Any problem that you had and it wasn't looked at like it is now. Now it's say no to drugs and blah, blah, blah and so you're deterred.

Similarly, a 34-year-old male pharmacist said,

I: A lot of people talk about that as being an age when everyone was just so mesmerized by the healing potential of these drugs and not really, the side effects hadn't caught up to, you know, people were just so impressed by what they can do. Is that what you're kind of talking about?

P: Yeah. Exactly. Xanax, for instance, was touted as the greatest drug ever. I remember going to an Upjohn lecture in probably the late '80s. The lecture was at a pharmacy local group. He said, "It's not habit forming. Basically, when you stop taking it, the symptoms of anxiety that reoccur are the original symptoms coming back of why you took the drug." This was a guy representing Upjohn doing that lecture. I mean, you laugh now, but I came home and told my dad, "No, no." That's what I told him, I said, "It's not habit forming." He was like, "Naa." I don't know why he knew or thought he knew, but he had always psychiatrists and psychiatrists were always told that Xanax was very habit forming. That was my opinion on that day. I believed the guy.

I: So coming out of pharmacy school you bought into that kind of relaxed orientation towards the medicine?

P: Umm hmm. I would say so.

A 39-year-old male pharmacist said,

And the more I learned about it with [Eli] Lilly, the more I learned about manufacturing and the pains they go through [to] the purify and stuff, it reinforced it. I mean, by that time I was pretty much convinced.

This exposure to propaganda about prescription drugs was clearly one-sided in nature. That is, the positive aspects of the drugs were never tempered by any real effort to educate the pharmacists about their coinciding dangers. For example, a 46-year-old male pharmacist said,

Yeah, what we learned back in the '70s, was yes this was indeed a problem for society, isn't it fortunate that pharmacy doesn't have it. We know too much. We know what these drugs will do, so obviously it could never happen to a pharmacist.

This problematic combination of access and professional reinforcement yields a feeling of familiar closeness toward the drugs. In essence, the pharmacists let their guard down and begin to buy into the fact that these drugs can significantly improve their own lives. In short, self-medication becomes a viable and attractive form of medicating away ones every problem. This paradox is articulated in the following exchange that occurred between myself and a 40-year-old female pharmacist:

P: But as far as respect for the medications, yes, I had that right out of school, a lot of respect for the power of good that the medications could do.

I: What do you mean by that?

P: Well, we have a lot of people who are alive today that would not be alive without some of the pharmaceuticals that we have. And that I think has an area of respect.

I: What about substance abuse? Did you know anything about it at that point?

P: Zero

I: Nothing in school or at work?

P: Right. Pretty scary, huh?

The interview data clearly demonstrate that pharmacists were able to formulate and maintain invincibility when it came to the issue of drug addiction. As a pharmacist, they thought that they were immune to the potential of drug addiction. For example, a 33-year-old male pharmacist said,

P: I felt that I could handle it better than the average lay person. Because after all, I'm a professional. So yeah, it was a very cavalier attitude towards drugs. Very cavalier.

I: So you bought into that "I'm a professional" thing?

P: Yeah, and I know what I'm doing, I know what the edge is, and I'm not going to over the edge, but clearly I was well over the edge. In the end I got very paranoid, and I got very out of control. And it's hard for me to talk about it, because it's a shameful thing. Because I do consider myself a professional, and I let myself down, and I let a lot of people down. But for me it was a very cavalier kind of, "I can handle this" kind of attitude. I know what I'm doing.

Similarly, a 42-year-old male pharmacist remarked,

It was the typical reinforcement--I can't be an addict because I know all about these things and I trained and I know these things inside and out. So I can't be an addict. I'm only doing this for the pharmacologic effects. I can stop any time.

Finally, a 43-year-old female pharmacist said,

I don't know that I really thought about it. I figured well yeah I know more about these drugs than anybody so maybe that justified my use and perhaps I thought being an educated, intellectual type person that I would be able to detect any problems. . . . Yeah, that's about it. I know what all these thing do, I can handle it. Absolutely. I knew all about the drugs and I could quit any time I wanted to. That was a real liability. Because that's where I rationalized it out. I'm a pharmacist, I know about these drugs and they're not going to bother me and I can quit any time I want.



In all, 46 of the 50 pharmacists spoke directly to this paradox of familiarity. Moreover, they had little question that this dangerous combination of access and knowledge contributed to the onset of their drug use. This paradoxical mind set did not simply impact upon pharmacists' decisions to start using prescription drugs. It also seemed to offer them a convenient rationalization to continue and increase their drug use. For example, it was not at all uncommon for interviewees to describe how they continuously broaden their definitions of acceptable use levels. This is seen in the comments of a 33-year-old male pharmacist:

I was on the hospice team and did patient consultations, evaluating their pain situations and figuring out ways to use drugs to control their pain. One of the ironic things is that I was an expert in the use of narcotics. I knew how to them for patients. I guess I felt that I knew so much about them that I would not get into trouble with abusing them myself. But there's a difference between knowledge and understanding. I thought that figuring out milligrams and durations and intervals that I would protect myself. None of that protects you in the long run. . . . You end up with your thought processes in one area, in another area you're impaired, before long you're not following the rules you set down. So you change the rules. You change them because they don't apply to you no more. I had rules like never two days in a row, but that was probably the first rule that I had made that I broke. Once I didn't take an opiate two days in a row, I would be okay. You can't become an addict if you're not using all the time. I kept that rule for quite awhile. Recreational use, lower level of use for quite awhile, not doing it every day.

In many cases, the pharmacists even described how they used their pharmacy knowledge to fine tune their drug use, hence maximizing their pharmaceutical potential. This trend can be seen in the comments of a 47-year-old male pharmacist:

P. Yeah, because now that I knew more I knew how to be more careful about it, to fine tune my taste. I knew what to stay away from and what to go towards. I knew how to keep from overloading my own system. I knew when I was starting to get toxic, and I could adjust my drug use. Because I was still at the point where I hadn't quite crossed that line yet.

I: So it didn't slow down your use, it didn't cause you to think, oh, this is bad. It more allowed you to see exactly how to do it and do it better

P: Exactly right. For example, access to the pharmaceuticals, if I didn't steal Percodan [narcotic analgesic], I knew that I could take a Tylenol #3 [narcotic analgesic] and something else and enhance the high and get that. I knew how to create that synergistic effect so that much inventory wouldn't be missing. Because it wasn't always Percodan. I would sometimes do a Tylenol #3, and those were so liberally kept, sold by the thousands for a week type of thing, it was such a big mover. So I could keep myself high and keep myself from developing the toxicity by combining other drugs and that sort of thing.

Similarly, a 41-year-old male said,

I used my training to its fullest potential. Fullest potential. . . . Do you remember John Lily? The guy did a lot of work, experimental work with dolphins. He had a book called the "Center of the Cyclone." In his book, he made a statement that one cannot consider oneself a true researcher unless one is willing to experiment, do the experiment on oneself. I said, "Exactly." That was one of my defining moments. So I would take that statement . . . If you didn't try it, you can't consider yourself a true researcher. That's how I viewed myself. I always believed in constant improvement.

As these pharmacists progressed into the later phases of their drug use, they were forced to ponder the significance of their drug use habit. At some point, they almost always came to the realization that they had a drug problem. However, very few individuals voluntarily sought help. Instead, they kept their problem a secret, reasoning that their knowledge would again afford them the vehicle to get themselves out of the predicament that they were in. To them, only uneducated street addicts needed professional drug treatment. This characterization can be seen in the comments of a 33-year-old female pharmacist.

Yeah, I didn't think that it would happen to me. I was pissed. I thought those were people that lived under bridges. People who didn't have college educations. People who, I guess I was just kind of a snob. I don't know that it affected my [use]. It probably did, but I'm not sure how it affected

me that much. Maybe people, like I hear people that, like my husband's drug of choice was a prescription drug so maybe he thought "people take it all the time, no big deal. Oh I'm sure I can too, maybe I don't need help."

Even when they got caught for stealing or using drugs, the pharmacists still maintained their shield of overconfidence. In the following quote, a 39-year-old female describes what happened when she was hospitalized for drug related health problems:

P: I was judgmental too. You know I--those were people who had no self-will. In the ER [emergency room] they did treat me like an addict and I'd get very angry, very angry.

I: Why?

P: Well, because I wasn't an addict. I would say things like don't you know who I am. I am a pain specialist in this hospital, I know when I need narcotics and they, you know, looking back on it, it must have just been humorous.

In the following quote, a 44-year-old male describes what happened after his wife caught him with drugs:

I stopped for a little while. I even stopped my drinking at one point there along about that same time I stopped drinking, that was at Christmas time, stopped drinking, drugging and everything for about three months. And of course you might ask me did you think you were an alcoholic at that time, and at that time. Well my conception of an alcoholic was a classic one of someone who got drunk with a bottle of Thunderbird under a bridge. So no, I did not think I was an alcoholic or a drug addict. I thought I was just taking the edge off. And I realized I had a problem, otherwise I have confronted it. I knew something was wrong, but I still didn't know myself. The word "drug addict" or "alcoholic" was the lowest piece of scum on the earth, so I didn't identify myself as that. But I knew that there was something wrong.

All of these interview excerpts demonstrate how pharmacists are able to use their professional expertise against themselves. Faced with a growing drug problem, they convince themselves that they are capable of controlling it without any outside assistance

### Unforgiving Attitudes Toward Drug Use

There was ample evidence that the profession-wide definitions of pharmacists' drug addiction also served to prolong the interviewees' drug dependency. In assessing their peers' attitudes about drug use, these recovering pharmacists repeatedly described a judgmental, hostile, unforgiving atmosphere. This trend is illustrated in the interview excerpts below. A 38-year-old female said,

P: All I knew was when I would kind of bring it up to my boss in a secretive way he would say things like if I ever found out that anybody was doing that I'd kick their ass out the door and it just made me more afraid to tell.

I: Do you think that's the view of the majority of pharmacists? That pharmacists are above that?

P: Yeah, I get that comment a lot. He should know better or she should know better. Because it's a moral thing for them.

When asked if she thought that the pharmacy profession was judgmental of substance abuse, a 39-year-old female pharmacist replied,

Oh yeah. Definitely. Which, I was judgmental too. You know I--those were people who had no self-will.

Finally, a 41-year-old male pharmacist offered the following harsh description of the profession's views on drug use

When you do go over the line, don't give me this bit about it's a disease. We know it's a moral issue, pure and simple. No, they're not accepting of it, and so their way of not accepting it is to deny it. Like I was telling you, that one pharmacist saying that, "Well, I don't have a problem with it, how can anybody else have a problem with it?" We know as pharmacists, as medical professionals, we know too much about diseases . . . [We] know better. We're trained in pharmacy school that we know more about drugs than most doctors do. So we do deserve this number one or number two Gallup Poll [honesty/integrity] rating because we are much smarter

Personal and profession-wide sentiments toward their drug using behaviors led these pharmacists to experience strong feelings of guilt and shame. In turn, this guilt and shame served to fuel their drug use and reinforce their aversion to seeking professional treatment. Several quotes illustrate this tendency. For example, a 38-year-old female said,

I was really guilty. I felt guilty and ashamed because I was very aware that I was stealing from my employer which was a prostitution of one my job values and a very shaming thing . . . . But it wasn't that it didn't matter, it's that I just had to ignore it because I couldn't get help. I mean in order to continue in my addiction I had to ignore it . . . I was a pharmacist and there was a lot of shame and concern that kept it going?

Similarly, a 48-year-old male remarked,

As the addiction went on I started to hate work. I loathed it. . . . There was all the inner conflict and turmoil. I compromised all my values and my beliefs. I compromised my professionalism. I was taught in pharmacy school correct values. I was taught by my family correct values. But my addiction had me compromise a lot. I didn't know what was going on, that I was being compromised by all this. I knew that I was saying one thing and doing another, that I had all these good values inside, but my behavior was all this other stuff and that led to just more conflict and turmoil which was easily taken care of by medicating again. . . . It kept it going for awhile because I wouldn't come forward. But then it also fueled [the realization that] I've got to stop

Finally, a 49-year-old male put it all into perspective by saying,

And you got to remember in these years, 1983, 84, this whole thing [recovery movement] had not started yet. A pharmacist was still—I mean there were no professional organizations, there were no support groups, there was no impaired pharmacist program. I was a lone wolf. And the guilt and the shame at being the only pharmacist in the whole world that ever had a drug problem just about did me in. I didn't know where to go, had no idea. As far as I knew there wasn't any impaired pharmacists—it was me.

This unforgiving attitude can also be seen in the treatment that these pharmacists' have received since entering recovery. Several pharmacists claimed that they suffered

severe stigmatization and overt acts of discrimination based on their drug history. This can be seen in the comments of a 38-year-old female pharmacist:

P. You know when I first went back to [work], that first week or two that I was in there I'd be in there with my boss, you know the manager of the store. And we would be working side by side and he got multiple calls about it and I could hear his side of the conversation. "Don't you know what she did, don't you know?" And I could hear him say on his side, "yes, but we're going to take a chance on her anyway." So people did call up

I. These were pharmacists calling?

P. Yes, other pharmacists calling up to warn him. I'm sure they were just trying to be nice whatever. At the time it hurt my feelings.

Similarly, a 41-year-old male said,

I mean, I went within a 60-mile radius of Houston, any open job, and applied. And I would put out my honest resume and say, "this is my past, it's kind of ugly, there are marks, I'm sorry." Forget it. So my sense is that the average Joe Pharmacist out there probably thinks that Jean [a leader in the recovery movement] should just pack her stuff up and go fill prescriptions herself, and that we did the deal, so we should be out of the profession.

At every turn, these pharmacists seem to have been faced with judgmental reactions from various components of the pharmacy profession. The realization and potential for these stigmatizing encounters seems to exacerbate their progressive spiral of shame and drug use. In essence, a strong sense of professional responsibility and the unforgiving posture of the profession lends itself to a situation where the individual must hit "rock bottom" before they choose to take action to remedy their drug use dependency.

### Summary

This chapter has presented a thorough picture of the nature and extent of drug use among 50 recovering pharmacists. In particular, the data show massive levels of drug use

that were usually drawn out over long drug use careers. The widespread presence of titrating, opportunistic theft, and "garbage heading" behaviors offer evidence of pharmacists exploiting their pharmacological knowledge and unrestricted access to prescription medicines. Moreover, the comprehensive discussion of the bad-intentioned misuser and good-intentioned self-medicator categories of users offers insight into the motivational aspects behind the onset and progression of pharmacists' illicit prescription drug use.

This interview analysis sought to determine how being and becoming a pharmacist contributed to the illicit prescription drug use behaviors of 50 recovering pharmacists. The length of this chapter alone demonstrates that I was unable to identify any single "silver bullet" phenomenon to explain why these pharmacists came to abuse prescription substances. However, I did uncover a combination of social factors that seemed to contribute to the onset, progression, and maintenance of these individuals' considerable drug habits.

There are a number of aspects of pharmacy education that facilitate drug use. I have shown how neophyte pharmacists have difficulty adjusting to their new found access and knowledge about prescription drugs. I have described a social scene in which the prevailing attitudes and behaviors of fellow pharmacy students facilitate drug use. Most importantly, I have argued that pharmacy school presents students with a troubling paradox. On one hand, students are granted access to prescription drugs and inundated with technical information about the pharmacology of prescription medicines. On the other hand, they are offered no training on dangers of substance abuse. This paradox has a tendency to foster a naive belief system in the students. They come to overemphasize the

positive aspects of the drugs while downplaying their negative potentials. This mind set offers the individual ample justification to begin and maintain self-medicating practices.

I was also able to document how numerous aspects of pharmacy practice contribute to pharmacists' drug use. I showed how the relaxed attitudes and behaviors of pharmacy mentors and fellow peers were internalized by the pharmacists. In many cases, the pharmacists were actively encouraged to engage in self-medication practices. I demonstrated a woeful lack of training and access to substance abuse treatment resources. Finally, I offered evidence linking drug use behaviors to perceived sources of occupational role strain.

My discussion of professional socialization centered principally on what I call a paradox of familiarity. I argued that a pharmacist is repeatedly exposed to information that reinforces the positive effects of drug use. For example, constant exposure to one-sided marketing presentations leave pharmacists with a relaxed attitude toward the tools of their trade. When this familiarity is coupled with a sense of professional invincibility, pharmacists come to view themselves as being immune to the dangers of substance abuse. This paradox of familiarity was repeatedly linked to the onset as well as the increasing progression (i.e., denial) of their drug use situation. Ironically, when pharmacists finally come to the realization that they have a problem with prescription drugs, internal and external sources of shame and guilt tend to prolong their use and keep them from seeking professional help.



### Notes

1. A PharmD degree is a four-year clinical-based degree that is pursued after satisfying two years of prerequisite prepharmacy classes.
2. The following pharmacy organizations participated in the Pharmacy Manpower Project: the American Pharmaceutical Association, the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American College of Clinical Pharmacy, the American Society of Consultant Pharmacists, American Society of Hospital Pharmacists, the National Association of Chain Drug Stores, the National Association of Retail Druggists, the National Council of State Pharmacy Association Executives, the National Pharmaceutical Association, the National Wholesale Druggists Association, and the Pharmaceutical Manufacturers Association.
3. The Pharmacy Manpower Project did not collect data on marital status or religious affiliation. As such, Table 1 presents no nationwide data for these variables.
4. The term "drug class" refers to the groupings of drugs that have similar psychoactive affects. For example, the narcotic analgesic drug class includes all opiate-based medications. All drugs of this class are prescribed principally for pain relief. Some of the other drug classes that will be discussed in this dissertation include amphetamines, barbiturates, benzodiazepines, stimulants, and non-narcotic analgesics. Each of these drug classes has its own distinguishing characteristics. The term "drug types" refers to the different medications contained in each drug class. Each drug type is assigned its own generic or brand name. Examples of drug types that fall into the narcotic analgesic class include Percodan, Morphine, Demerol, and Dilaudid. Note that there are often hundreds of drug types within each drug class.
5. The term narcotic analgesic is commonly used to refer to the opiate-based medications. All narcotic analgesic drug types are classified as CII substances under the Controlled Substance Act of 1970. Each of these substances are highly addictive pain medications and are subject to the most strict inventory and dispensing controls. Narcotic analgesics drug types include Morphine, Dilaudid, Demerol, Percodan, Percoset, Codeine, and Hydrocodone.
6. The term "poly-drug user" refers to an individual who routinely uses multiple types or classes of drugs and alcohol. Poly-drug use behaviors usually result in states of cross addiction as the body becomes a tolerance and dependence on multiple forms and combinations of drugs. This advanced type of drug habit is generally very difficult to reverse or control and treatment becomes a very complicated detoxification process.

7. Those individuals who were supplementing their prescription drug use with alcohol or street drugs were forced to look outside of the pharmacy to obtain these substances. Similarly, there was one cocaine user and three narcotic users who occasionally obtained drugs through the illicit drug market. However, all 50 pharmacists relied principally on pharmacy stock as their chief source of medications.

8. Telephone prescription orders allow a physician to call in a prescription request. Upon receiving the call, a pharmacist fills out a telephone prescription order form, fills the order, and has it waiting for the patient who was unable to meet with their physician. This system is intended to enhance patient care in the case of emergency or the physical absence of the patient's attending physician. However, telephone prescription orders limit the paper trail associated with a given prescription. More importantly, the system gives a pharmacist access to prescription forms that he/she can fill out and then justify dispensing large numbers of dosage units.

9. Federal regulations stipulate the 5% shall serve as a minimum level of tolerable loss. The mandate is based on the assumption that random errors can and will occur and the DEA does not want to be investigating every small shortage. Employers, however, are encouraged to establish more strict loss standards. Moreover, when evaluating losses, they are encouraged to take into consideration the number of dosage units, not simply percentages. Note that most pharmacy employers simply impose and enforce the minimum requirements.

10. Subcutaneous injection, often referred to as "subque" is a method of application wherein the needle is inserted just below the skin. The drug is thus released into an area of fatty tissue and absorbed within minutes. Note that subcutaneous injection does not yield the immediate drug effects that are associated with intravenous application. However, it is often preferred since it does not result in visible track marks.

11. The term "bottom" is used within drug treatment circles to refer to the most progressed point of one's drug use career. It is derived from the analogy: "to hit rock bottom." In most cases, a person either dies or seeks treatment when they reach their subjectively determined "bottom." A person is said to have had "low bottom" when they allow their drug use situation to progress into the latter stages of addiction. Common characteristics of a low bottom include serious health problems, suicide attempts, loss of employment, loss of spouse, etc.

12. By prescription drug use, I am only referring to their illicit use of such medicines. Obviously, these good-intentioned self-medicators had been sick in the past and hence been exposed to a variety of prescription drugs under the direction of a doctor's orders.

13. In all, sixteen of the interviewees were members of pharmacy fraternities. Most of these individuals were classified as bad-intentioned misusers.

## CHAPTER VI

### FINDINGS OF THE ARCHIVAL EXAMINATION OF CORPORATE LOSS PREVENTION APPREHENSION RECORDS

The archival component of the study involved gathering pharmacists drug abuse apprehension data taken from the official corporate loss prevention apprehension records within two major retail pharmacy chains. My review of all apprehension reports dated from 1991 to 1996 produced a sample of 89 cases involving pharmacists' drug related wrongdoing. These offenses occurred in retail pharmacies located in 19 different states. There were no multiple offender cases contained in the files that were reviewed. All of the investigations centered on a single perpetrator. The detailed findings are presented below.

#### Demographic Profile of Apprehended Offenders

Given that my access was restricted to loss prevention files (as opposed to human resource files), the demographic profile of the perpetrators is somewhat limited. The demographic characteristics of the 89 accused drug abusing pharmacists are presented in Table 3. The data show that males were once again over represented in the offender group (88.8% male vs. 11.2% female). Notice also that there was a broad age distribution among the accused pharmacists, ranging from 23 to 66 years. The average age was 39.9 years and more that one-half (56%) between of age of 30 and 50. There was considerable missing data on the race variable (information unavailable for 41 cases). Note, however, that there were only six non-Whites (3 African Americans, 2 Hispanics, and 1 Asian) among the 48 cases where race distinction was provided.

Table 3. Demographic Characteristics of the 89 Pharmacists from the Loss Prevention Apprehension Report Analysis.

Variable	Percent of Sample (N =)
Gender	
Male	88.8 (79)
Female	11.2 (10)
Age (Mean = 39.9, SD = 10.8)	
0-29	16.9 (15)
30-39	25.8 (23)
30-49	20.2 (18)
50-59	10.1 (9)
60+	5.6 (5)
Unknown	21.3 (19)
Race	
White	47.2 (42)
African American	3.4 (3)
Hispanic	2.2 (2)
Asian	1.1 (1)
Unknown	46.1 (41)
Job Title	
Staff Pharmacist	43.8 (39)
Pharmacy Manager	21.3 (19)
Asst. Pharmacy Mgr.	12.4 (11)
Floating Pharmacist	18.0 (16)
Pharmacy Intern	2.2 (2)
Store Manager	2.2 (2)

Referring to Table 3, note that the accused pharmacists held diverse job titles: 43.8% were staff pharmacists, 21.3% were pharmacy managers, 18% were part-time, "floating" pharmacists,<sup>1</sup> 12.4% were assistant pharmacy managers, 2.2% were pharmacy interns, and the remaining 2.2% fulfilled dual responsibilities as pharmacy and store manager. There was a broad job tenure distribution among the accused pharmacists. Their

length of employment ranged from less than one month to 360 months. On average, however, the pharmacists had been employed by their respective retail chain for just over five years or 62.9 months. In most cases, the offender confessions indicate that they were able to perpetrate drug thefts/use and avoid detection for a significant part of their tenure.

The findings from the Pharmacy Manpower Project (see Table 2 in Chapter V) allow us to do some limited comparisons between the demographic characteristics of the sample and the overall population of over 190,000 pharmacist who are practicing in the U.S. Note that this sample of 89 accused pharmacists contains a disproportionately larger percentage of males--almost 90% of the sample are males while just under 65% of the overall pharmacy population are males. There are less disparate differences in the age and race variables. Namely, the sample has slightly more Caucasians and is somewhat younger than the overall pharmacy population.

The data in Table 3 compare favorably with the demographic data from the interview component of the study. This comparison is presented in Table 4. In particular, notice that the vast majority of pharmacists in both the apprehended archival and interview samples are males (89% and 78% respectively). Similarly, the data in Table 4 show that both samples are comprised primarily of White pharmacists (88% vs 96%). Note, however, that percentages for the archival component do not include the 41 missing cases in which the race of the offender was unavailable.

The age data in Table 4 suggest that there are slightly more very young pharmacists (less than 30) in the apprehension archival sample than there are among the interview participants. However, this situation is tempered by the fact that the mean ages in these two groups are remarkably similar--39.9 years in the archival sample and 41.4

Table 4. Comparison of the Demographic Characteristics (as %) of the Pharmacists from the Loss Prevention Apprehension Report Analysis and the Interview Participants.

Variable	Appended Pharmacists (N = 89)	Interview Participants (N = 50)
Gender		
Male	88.8 (79)	78 (39)
Female	11.2 (10)	22 (11)
Race*		
White	87.5 (42)	96 (48)
African American	6.3 (3)	2 (1)
Hispanic	4.2 (2)	2 (1)
Asian	2.0 (1)	--
Age**		
0-29	21.4 (15)	8 (3)
30-39	32.9 (23)	38 (19)
40-49	25.7 (18)	36 (18)
50-59	12.9 (9)	12 (6)
60+	7.1 (5)	6 (3)
Supervisory Role		
Staff Position	64.0 (57)	56 (28)
Managerial Position	36.0 (32)	44 (22)

Note: The demographic distributions in this table are only based on those cases where data were provided. Reported figures do not include percent missing.

\* There were 19 cases from the archival sample where no age data was available. Thus, percentages were based on 70 valid cases.

\*\* There were 41 cases from the archival sample where no race data was available. Thus, percentages were based on 48 valid cases.

years in the interview sample. More importantly, notice that a disproportionate majority of both samples were between the ages of 30 and 50. This again points to the possibility a cohort of drug using pharmacists was produced when experimental youths went through pharmacy school during the 1960s and 1970s. Permissive societal attitudes toward recreational drug use, when coupled with the high access and understanding of drug effects that results from pharmacy school, may have left the pharmacists of this era more vulnerable to prescription drug use.

Table 4 also shows that the majority of pharmacists in both samples were working as staff pharmacists at the time of their apprehension/confession. This finding suggests that all pharmacists appear to have the necessary access and knowledge to perpetrate drug use and drug theft behaviors.

The findings presented in Table 4 suggests that there are considerable similarities between two very different types of drug involved pharmacists. Remember that the pharmacists from the archival and interview components of the study were gathered using nonrandom sampling techniques. Moreover, both samples include only pharmacists who have been apprehended or voluntarily came forward confessing their drug using behaviors. These potential sampling biases raise uncertainty about the representativeness of the resulting data. Given the presence of these potential criticisms, similarity in the demographic characteristics of these two samples becomes an important conclusion of my study.

#### Typical Incident Description

All 89 of the loss prevention apprehension reports were focused principally on a pharmacist's involvements in prescription drug theft. All of the investigations were

considered closed at the time of my data collection. The investigations ranged in length from one day to four and one-half months (135 days). Each investigation yielded a lengthy and often quite detailed summary of the events of the case. In many cases, the files included copies of written confessions, police reports, official drug audits, DEA forms, and a host of other documents. With official permission, I confidentially accessed all available information and compiled the following description of the cases.

#### Origins of Allegations Leading to an Investigation

The 89 pharmacists became the focus of loss prevention investigations for a number of specific reasons. However, it is most can be grouped into three general categories, namely, loss prevention investigations, coworker tipoffs, and external tipoffs.

The largest percentage of cases (47.7%) were initiated when members of the loss prevention department became suspicious of some aspect of the store inventory or the pharmacist's behaviors. These situations included a routine "spot check" of the store by loss prevention field agents, surprise employee package checks, annual drug audits, or the implementation of a host of other inventory control policies. These 42 investigations were usually "open and shut" cases since loss prevention officials were present on the scene (i.e., drugs found on the person during a package check) or had hard evidence (video tape of theft incident) linking the individual to the drug theft. Moreover, given the "zero-tolerance attitude of loss prevention officials, these cases often involved only minor drug infractions on the part of the accused pharmacist.

A third of the investigations (33%) were initiated after a coworker reported some form of suspicious behavior to loss prevention officials. The case files show that there were a number of circumstances that led to the coworker tipoffs. In many cases, the accused pharmacist was seen stealing or ingesting drugs at work. Other times, the



pharmacy manager became suspicious after annual drug inventories revealed significant shortages. It was also common for coworkers to become suspicious upon discovering hidden stashes of unaccounted drugs, fraudulent prescription forms, or errors in patient prescription records. Several of the initial coworker tipoffs came in the form of anonymous telephone reports. In almost every case, the nature of the suspicious behavior was quite blatant and serious. Only a handful of cases were referred on to loss prevention officials due to minor infractions or small errors or shortages.

These data support the above reported findings from the personal interview component. In particular, they suggest that pharmacists must commit egregious violations before coworkers will risk reporting them to authorities. This trend offers support to the notion that moderate levels of drug theft and/or drug use are often tolerated or noticed by pharmacy coworkers. There was additional data to support the assertion that drug tolerant attitudes do exist in the workplace. Namely, in 24% of the cases, follow-up investigations revealed that some other individual had prior knowledge of the pharmacists' drug use/theft but chose not to report it.

The apprehension reports show that 19.3% of the initial investigations resulted when some source outside of the corporation reported allegations to loss prevention officials. These external sources included customer complaints, police investigations, phone calls from physicians who had treated the pharmacist in question for some drug related ailment (e.g., attempted suicide) and contacts from the State Board of Pharmacy. Some of the customer tips resulted from minor infractions on the part of the accused pharmacist (e.g., under filled prescription, sudden change in demeanor). However, in most cases, the information only came to the attention of the loss prevention department after

the pharmacist had already perpetrated some form of major drug theft without being immediately apprehended by corporate officials.

Once the investigation was initiated, loss prevention authorities relied on a variety of strategies to gather evidence against the suspected pharmacists. The most common strategies included hidden, closed-circuit video cameras, daily drug audits, and interviews with coworkers. Without exception, the use of hidden cameras was the most successful strategy. This allowed investigators to gather uncontested, incriminating evidence against the suspected offenders and use it to encourage confessions.

### Theft Techniques

The incident report data show that many of the pharmacists relied on multiple theft strategies. In most cases, however, most of these theft strategies were primitive and unsophisticated. For example, 65.2% of the pharmacists made no effort to cover their thefts, they were simply pouring pills out of the bottle and transporting them out of the store on their person or in some other way. Similarly, 19.2% of the apprehended pharmacists were ingesting the drugs at work and making no effort to cover their tracks. In fact, the data show that 6.7% of the cases involved situations where the pharmacist actually had a legitimate doctor's prescription order but chose not to pay for the drugs. Finally, 4.5% of the cases involved practices wherein the pharmacist was under filling customers' prescription orders and keeping the difference for themselves.

A somewhat surprisingly large 32.5% of the cases involved some form of fraudulent forgery of prescriptions. In some of these cases the pharmacists forged telephone prescription orders. Others chose to alter computer files to make it seem as if prescriptions had been ordered and filled for existing customers. In still other cases, the

pharmacists completely invented bogus customer profiles and accounted for shortages via the phony patients

The above data on theft strategies are quite similar to the findings contained in the personal interview conversations. Both data sources suggest that pharmacists are not much concerned with covering up their drug thefts--most simply dump the drugs into a pocket or ingest them on the spot without taking any measures to cover up for the shortages. This is a sign that pharmacists are well aware of the loopholes in the present drug accounting systems and realize that they can steal significant numbers of dosage units without being detected.

#### Nature and Extent of Drug Thefts

Once a drug related investigation was begun, it was common practice for loss prevention officials to conduct a thorough drug audit to determine the full extent of drug shortages. Armed with this information and whatever other evidence they had accrued, they would then confront the suspected pharmacist. Based on the response of the accused, they would attribute some or all of the shortages to the suspected individual. Table 5 summarizes the information on the types of drugs and the number of dosage units that were involved in the detected thefts.

Most of the apprehended pharmacists were stealing multiple classes of drugs. This is evidenced by the figures presented in the first data column of Table 5. Moreover, the narrative data contained in the case files (e.g., signed confessions) often suggested that the pharmacists involved were engaging in the same types of "garbage heading" and "titrating" behaviors that were detailed earlier in the personal interview component of the study.

Table 5. The Types of Drugs and Number of Dosage Units Stolen by the 89 Apprehended Pharmacists.

Drug Class	Number of Cases*	Mean # of Units	SD	Median # of Units
Strong Narcotics	51	7,173	22,130	1,650
Benzodiazepines	17	6,743	18,768	1,000
Mild Narcotics	11	3,761	4,080	3,600
Amphetamines	11	6,309	17,194	636
Barbiturates	5	270	256	265
Miscellaneous	20	656	1,296	213
All Substances	89	6,923	31,265	1,000

\* The presence of poly-drug use produces totals in excess of 89.

There was a wide variation in the numbers of dosage units involved in the 89 cases that were reviewed. Overall, the drug thefts ranged from 2 units to 289,041. The corresponding dollar losses associated with these thefts ranged from \$11 to \$47,802. Referring to Table 5, note that there are some rather large standard deviations for the dosage unit data (Table 5).<sup>2</sup>

The incident report data suggest that most apprehended pharmacists were involved in significant levels of drug theft. In particular, the data provided at the bottom of Table 5 shows that the median number of dosage units was 1,000. Note that the median retail cost of the lost drugs was reported at \$750 (mean = \$2,841 & SD = \$6,471).

The data in Table 5 clearly demonstrate that strong narcotic analgesics (e.g., Percodan, Codeine-based substances, Vicodin) were the favored targets of the perpetrators--51 of the 89 cases involved the theft of some form of strong narcotic analgesic. The median number of dosage units was 1,650. The benzodiazepine class (e.g.,

Valium, Xanax, Halcyon) was also a favored target of the pharmacists. Seventeen cases included the theft of these tranquilizer-type substances with the median incident involving 1,000 dosage units. While only 11 of the 89 cases involved the theft of some form of mild narcotic analgesics (e.g., Darvocet, Lortab, Tylenol w/Codeine), pharmacists often stole large numbers of dosage units (median = 3,600). Mild narcotic analgesics are especially vulnerable to thefts since they are not as stringently controlled as the stronger (Schedule II) narcotics and are usually sold in high volume.

Other popular targets of drug theft included amphetamines (11 cases with a median of 636 pills) and barbiturates (5 cases with a median of 265 units). The "miscellaneous" category in Table 5 includes a wide variety of controlled substances, everything from antibiotics to birth control pills.

In summary, the data on the nature and extent of the drug theft incidents closely parallels the findings presented in the previous chapter. Both groups of drug using pharmacists were stealing large numbers of dosage units from a variety of drug classes, thus suggesting large scale "garbage head" use patterns. Moreover, both data sources indicate that strong narcotic analgesics were most popular in these pharmacist's diverse drug use behaviors.

#### Response of the Accused Pharmacist

The following discussion outlines the resulting effort to reconstruct the nature and extent of the individuals drug involvements. When loss prevention investigators were satisfied with the accuracy of the evidence that they had accumulated, they would confront the suspected pharmacist with their allegations. At this point, the pharmacists typically responded in a variety of ways

The use of hidden cameras and drug audits usually afforded investigators significant leverage when they confronted the suspected pharmacists. This "red handed" evidence situation led to a full confession in the majority of the cases (53 of the 89 cases or 59.6%). In 27% of the cases where a full confession was not obtained, the accused pharmacists did admit to some smaller portion of the suspected drug thefts. Interestingly, there were only three cases (3.4%) where the confrontation produced a complete denial. In another nine cases (10.1%) the pharmacist initially refused to comment on the charges.<sup>3</sup>

It was standard practice for loss prevention investigators to engage in substantial questioning of suspected pharmacists and their coworkers. The notes from these interrogation sessions, when coupled with any written confessions that were included in the case files, allowed me to determine the motivation behind the offender's drug theft. Summary information on the intent of the offenders is presented in Table 6.

Table 6. The Intent Behind the Pharmacists' Drug Theft

Intent	Number of Cases	Percent of Sample
Habitual Use	49	55.7
Occasional Self-medication	20	22.4
Give Them Away	11	12.4
Street Sales	5	5.6
Pharmacy Fraud	2	2.2
Use + Street Sales	2	2.2

The analysis revealed that the vast majority of the offenses (78.1%) were perpetrated for reasons of personal consumption. In particular, Table 6 shows that 55.7% were stealing to supply a personal drug habit, while another 22.4% claimed that they were

stealing for occasional self medication purposes. If pharmacists were not themselves using the drugs, they were often (12.4%) stealing to defer the costs for a friend or family member or to supply the person's drug habit. Referring to Table 6, notice that very few pharmacists were stealing the drugs for financial gain. 5.6% were selling them on the street, 2.2% were defrauding the health care system, and 2.2% were both using and selling the drugs.

The findings in Table 6 reinforce my assertion that pharmacists tend to hold overconfident attitudes toward drug use. In particular, the data suggest that most pharmacists are hesitant to give away or sell prescription drugs. This type of behavior is viewed as unethical and against the best interests of the profession. At the same time, they appear to have very few problems with their own personal drug use. They are able to use their training and knowledge to convince themselves that they can handle drugs, thus insulating themselves from the realities of abuse/addiction potentials.

#### Corporate Response to Drug Apprehension Incidents

My analysis revealed that the victimized drug chain corporations pursued a number of sanctioning alternatives with the offending pharmacists.<sup>4</sup> These responses are presented in Table 7. Referring to Table 7, notice that in all but one of the cases, the offending pharmacist was terminated. Other popular responses include restitution (70.8%) and contact with police (47.2%).

The data in Table 7 show that less than two-fifths (40.4%) of the cases were referred on to the Drug Enforcement Agency (DEA). This is interesting given the fact that official DEA regulations require that all drug theft incidents be documented and reported.

Table 7. Corporate Response to Drug Theft Incidents (N = 89).

Sanction	Number of Cases	Percent of Sample
Termination	88	98.8
Restitution	63	70.8
Police	42	47.2
DEA	36	40.4
State Board of Pharmacy	24	27.0
Recovery Network	13	14.6

This level of noncompliance appears to be linked to the firm's complaints that DEA investigations are time consuming, full of inconveniences, and often result in sanctions against the corporation, as well as, the individual. Given the potential down-side associated with DEA involvement, firms explain that they often only involve the DEA in those cases where they have also involved the police or State Board of Pharmacy. Here, they feel obligated to report to the DEA rather than take the chance that they will later be confronted by the DEA when they find out about a case through alternative sources.

The information in Table 7 suggests that retail chains also try to avoid involving the available social control entities of the pharmacy profession. For example, only 27% of the case files contained information that revealed State Board of Pharmacy involvement. One corporate official commented that the corporation had little faith in the State Board of Pharmacy's commitment to dispensing consistent and stringent sanctions against drug using pharmacists.

The data on Recovery Network involvement (Table 7) present an even more disturbing trend--only 13 (14.6%) of the 89 pharmacists were referred on to a recognized



drug treatment organization. These state-level recovery networks serve as advocates for drug addicted pharmacists. As such, they offer the affected pharmacist important support in their efforts to remedy the personal and professional consequences associated with their drug use/theft. Obviously, however, victimized corporate loss prevention officials are not receptive to involving these advocacy groups in the process. Unless the pharmacist personally finds out about the recovery networks, it seems that they are left on their own to defend their license and seek professional treatment for their drug abuse problem. This lack of support can only add to the pressure on the affected pharmacist and further increase the likelihood of their eventual demise.

The findings in Table 7 clearly demonstrate that retail drug chains are not overly concerned about the long-term welfare of those individuals who they catch stealing drugs. Instead, the data suggest that they tend to adopt a self protective, punitive stance that emphasizes punishment and protection of their own financial liability in these matters. In this respect, loss prevention officials treat drug theft like any other employee theft incident--they want to be rid of the problem employee and they want to recover the money that they have lost.

### Summary

In many respects, the archival loss prevention apprehension data support the findings from the interview chapter. Both data sources reveal that pharmacists are easily able to perpetrate large scale drug thefts against their pharmacy employers. Moreover, the data show that they are able to maintain heavy drug theft patterns over long periods of time without being discovered

The archival loss prevention apprehension data show that the vast majority of pharmacists' drug thefts result in the individual's subsequent use of the stolen substances. Interestingly, even though they are personally abusing drugs, the pharmacists' strong sense of professional responsibility seems to deter them from selling or giving away the drugs without a prescription to someone else, especially nonpharmacists. At the same time, they see no problem with their own personal drug use for as trained pharmacists, they believe that they can easily handle their level of ingestion. The demographic profiles from both data sources (archival and interview) confirm that typical known drug using pharmacists are most likely to be white males between the ages of 30 and 50 years of age. Moreover, outside of their drug use, they appear to be hard working pharmacists who usually excel at their jobs. Given the stakes involved, they are usually very adept at keeping their drug use problem a secret. Moreover, when peers, friends, or family members do find out about the problem, they rarely take immediate action. In fact, for many cases, the drug use is tolerated or even encouraged by existing workplace norms.

Ironically, the data suggest that the prevailing professional reactions to the problem actually may be contributing to pharmacists' further drug use behaviors. In particular, employers appear to offer troubled and addicted pharmacists very few viable alternatives to help them out of their problem. They give them very little training or corporate resources to deal with their drug abuse and present a strong punitive reaction when problems finally surface by way of drug theft apprehensions. This punitive corporate response seems to drive pharmacists further into denial and secrecy, thus contributing to progressively greater drug use and drug theft.

The past two findings chapters (V and VI) have presented a comprehensive picture of the drug use behaviors among two groups of known drug using pharmacists, the vast majority of which had significant drug abuse histories. At this point, it is helpful to compare these findings to the existing research that has been done on recovering drug using pharmacists. This discussion will help demonstrate the validity of my findings and serve as a good transition into the presentation of the findings from the survey component of the study.

The above descriptions of drug abusing pharmacists revealed in the archival portion of the study are similar to the profiles that have been presented in past studies of known drug using pharmacists (Bissell et al, 1989, Gallegos et al, 1988, Penna & Williams, 1985). For example, all of the studies have found drug using pharmacists to be disproportionately male. For example, the sample of recovering pharmacists in the Bissell study was comprised of 83% males and 17% females. Similarly, the Gallegos et al. study (1988) found that 89% of the pharmacists who entered drug treatment from 1975 to 1987 were male.

All of the available data demonstrates that drug using pharmacist tend to be predominantly white. For example, there were no people of color in the Bissell study and less than 13% of the sample in the Gallegos study were nonwhite. The available research also suggests that recovering pharmacists are most often between 30 and 50 years of age. The average participant in the Bissell study was 39 years old while the average pharmacist in the Gallegos study was 36 years old.

Outside of their drug use, these deviant pharmacists appear to be well liked and well respected members of the pharmacy community. All available research (Bissell et al,

1989, Gallegos et al., 1988) shows that recovering pharmacists tend to excel in their pharmacy education as well as pharmacy practice. Significant numbers earn advanced degrees and go on to management positions. By all accounts, they seem to be well-liked and respected by both their peers and employers.

We know that most recovering drug using pharmacists were poly-drug users and that the use of narcotic analgesic usually factored into their drug use regimen. For example, 57% of the pharmacists in the Gallegos study (Gallegos et al., 1988) report abusing four or more types of drugs with 59% using some form of narcotic.

Finally, all of the available data suggest that recovering pharmacists were able to develop significant drug use behaviors that resulted in very "low bottoms." For example, the pharmacists in the Bissell study (Bissell et al., 1989) displayed suicidal tendencies and experienced a host of additional medical problems due to their progressively higher drug use levels.

#### Notes

1. A part-time, "floating" pharmacist is a licensed pharmacist who fills shifts at a number of stores within a given geographical area. Much like a substitute school teacher, their principal role is to fill the shifts of the full-time pharmacist while he/she is sick or on vacation. These individuals are employed by the retail pharmacy chain and are usually dispatched to work at a given store by a district store manager. Given the large numbers of stores in these pharmacy chains, these individuals are usually able to obtain steady work usually approaching 40 hours per week.
2. Given the wide ranges of the statistical distributions, subsequent discussions will focus principally on the median number of dosage units.
3. In all nine cases where the pharmacist initially refused comment, follow-up police or DEA investigations produced at least a partial confession.
4. In most cases the firm imposed multiple sanctions upon the offending pharmacist.

## CHAPTER VII FINDINGS FROM THE SURVEY OF PRACTICING PHARMACISTS

The self-administered, mailed, anonymous survey of practicing pharmacists is the third and final data source used in the present study. This component of the data collection effort consisted of a 4-page survey instrument that was mailed to random sample of 2,036 presently practicing U.S. pharmacists. A total of 1,016 completed questionnaires were returned, yielding a response rate of 50.2%. The survey component of the study is particularly important to the overall study. First, it is the only data source in the study that benefited from a random sampling strategy. Whereas all other data sources were of apprehended individuals, these data are much more generalizable to all practicing pharmacists. Second, this is the only data source that provides a control or comparison group of pharmacists without any known drug use history. This feature allows me to statistically evaluate the relationship between pharmacists' drug use and various social factors

### Sample Demographics

The demographic characteristics of the 1,016 practicing pharmacists responded to the survey are presented in Table 8. The data show that the survey respondents were comprised of 50.3% males and 49.6% females. The average respondent was 41.1 years old ( $SD = 13.7$ ). Note that there was a broad range of distributions in the age variable (from 23 to 86 years). The sample was almost exclusively white (90.5%). Moreover, the vast majority of the respondents were married (72.8%).

Table 8. Demographic Characteristics of the 1,016 Practicing Pharmacists Who Responded to the Mailed Survey

Variable	Number of Respondents	Percent of Sample
Gender		
Male	504	49.6
Female	511	50.3
Age (Mean = 41.1, SD = 13.7)		
0-29	303	29.8
30-39	244	24.1
40-49	208	20.5
50-59	150	14.8
60+	111	10.9
Race		
White	919	90.5
Asian	52	5.1
African American	23	2.3
Hispanic	12	1.2
Other	10	1.0
Present Marital Status		
Single	217	21.4
Married	740	72.8
Separated	6	.6
Divorced	38	3.7
Widowed	15	1.5
Religious Affiliation		
Roman Catholic	334	32.9
Protestant	415	40.8
Jewish	66	6.5
Nondenominational	102	10.0
Other	87	8.6
Unknown	12	1.2
Religiously Active?		
No	619	38.8
Yes	398	60.9
Unknown	3	.3
Degree Attainment		
B.S. in Pharmacy	919	90.5
PharmD	107	10.5
M.S. in Pharmacy	38	3.7
Ph.D. in Pharmacy	2	.2
Other nonpharmacy	133	13.1
Class Rank		
Top 1/3 of Class	501	51.2
Middle 1/3 of Class	423	43.2
Bottom 1/3 of Class	55	5.4

The religious affiliation of the survey respondents was as follows: 40.8% Protestant, 32.9% Roman Catholic, 10% nondenominational, and 6.5% Jewish. Note that 87 respondents (8.6%) indicated that they observed some "other" form of religion and 12 (1.2% did not respond). The data in Table 8 also show that a considerable majority of the respondents (60.9%) described themselves as being "religiously active."

Referring to Table 8, note that the vast majority of respondents (90.5%) had obtained a Bachelor's degree in pharmacy. The data on educational attainment also show that considerable numbers of pharmacists had received one or more additional degrees (i.e., PharmD, M.S., Ph.D., or "other"). The last panel of Table 8 shows the graduating class rank (at B.S.) of the respondents.

Table 9 offers the reader information about the present employment characteristics of the 1,016 survey respondents. Notice that the majority of respondents (65.1%) were practicing in some retail setting while a sizable minority (22.2%) were working in a hospital pharmacy. There was a wide range of salaries reported by the pharmacists. Moreover, notice that the majority of respondents (62.7%) held staff pharmacist positions.

There are several other career facts that warrant mentioning. For example, the average respondent had been practicing pharmacy for 16.3 years. In an effort to gain a better understanding of career trajectories, each respondent was asked to indicate what portion of their career was spent in different practice settings. This exercise produced the following breakdown of work history: 35.4% chain retail, 31.6% independent retail, 23.1% hospital, 8.6% "other setting," and 1.1% home infusion.

Table 9. Employment Characteristics of the Survey Respondents (N = 1,016).

Variable	Number of Respondents	Percent of Sample
Current Practice Setting		
Retail	661	65.1
Hospital	226	22.2
Home Infusion	28	2.8
Other Practice Setting	155	15.3
Unemployed	23	2.3
Current Salary		
Less than \$40,000	114	11.4
\$40,000-\$49,999	165	16.2
\$50,000-\$59,999	348	34.3
\$60,000-\$69,999	222	21.9
\$70,000-\$79,999	71	7.0
\$80,000 or More	77	7.7
Supervisory Role		
Staff Pharmacist	637	62.7
Managerial Role	352	34.6
Unknown	27	2.7

### Drug Use Behaviors

A number of the survey items were designed to determine the responding pharmacist's personal drug use behaviors. The first survey item gave them an opportunity to self-identify as "drug abusers." Specifically, they were asked, "at any time during your life, have you felt that you were abusing some form of prescription or nonprescription drug?" Fifty-six pharmacists (5.6%) answered yes to this question. A follow-up question revealed that poly-drug abuse was the norm among these 56 individuals with alcohol, narcotic analgesics, amphetamines, and benzodiazepines among the most common forms of abused substances.



Given the personal shame and public stigma associated with drug use among pharmacists, it was expected that the above survey item would elicit limited numbers of affirmative responses. As such, several other inquiries were used to assess the details of each pharmacist's personal involvement in illicit prescription drug use. For example, respondents were presented with a list of 12 different categories of drugs and asked to indicate how many times they had used each without first obtaining a prescription.<sup>1</sup> The results of this question are presented in Table 10.

The data in Table 10 demonstrate that there were considerable levels of drug use reported by the survey respondents. Notice that self-reported use of unprescribed antibiotics and marijuana/hashish are included in Table 10. While it is helpful to acknowledge the high use levels of these two drug types (48.1% have used antibiotics and 21.8% have used marijuana/hashish), they will not be included in any of the subsequent analysis. The use of these substances does not involve a pharmacist's illicit use of a potentially addictive prescription medications and are of secondary importance to the drug abuse focus of this research. My discussion will focus, instead, on the remaining 10 most potentially addictive types or classes of prescription drugs.

Referring to Table 10, notice that there were large numbers of pharmacists who admitted to using some form of pain medication without a prescription. Specifically, 7.1% had used narcotic analgesics and 28.1% had used some form of nonnarcotic analgesic. The Controlled Substance Act classifies narcotic analgesics as Schedule II drugs, meaning that they are pain medications with the highest addiction potential. Nonnarcotic analgesics, on the other hand, are forms of pain medication that have slightly less addiction potential and hence classified as Schedule III, Schedule IV, or Schedule V substances. Regardless

Table 10. Reported Number of Lifetime Illicit prescription drug use Episode Percentages (N = 1,016)

Drug Type/Class	0	1	2	3-5	6-10	11+	Any Use
Marijuana/Hashish	76.4 (776)	2.3 (23)	3.2 (33)	5.9 (60)	3.1 (31)	7.3 (74)	21.8 (221)
Cocaine	92.6 (941)	1.0 (10)	.6 (6)	1.0 (10)	.7 (7)	1.9 (19)	5.1 (52)
Amphetamines	84.8 (862)	2.7 (27)	1.7 (17)	3.4 (35)	2.1 (21)	3.5 (36)	13.4 (136)
Other Stimulants	91.0 (925)	.6 (6)	.9 (9)	2.1 (21)	.6 (6)	2.0 (20)	6.1 (62)
Barbiturates	95.0 (965)	.2 (2)	.2 (2)	.5 (5)	.6 (6)	.9 (9)	2.4 (24)
Benzodiazepines	89.6 (910)	1.2 (12)	1.3 (13)	1.8 (18)	1.5 (15)	2.3 (23)	8.0 (81)
Narcotic Analgesics	90.2 (916)	1.0 (10)	1.1 (11)	2.1 (21)	1.2 (12)	1.8 (18)	7.1 (72)
Nonnarcotic Analgesic	69.8 (709)	1.7 (17)	3.7 (38)	8.0 (81)	4.7 (48)	9.9 (101)	28.1 (285)
Inhalants	94.6 (963)	.5 (5)	.6 (6)	0 (0)	.3 (3)	.6 (6)	2.0 (20)
Muscle Relaxants	83.8 (851)	2.6 (26)	2.9 (29)	4.7 (48)	1.7 (17)	2.0 (20)	13.8 (140)
Antidepressants	95.5 (970)	.4 (4)	.2 (2)	.3 (3)	0 (0)	.7 (7)	1.6 (16)
Antibiotics	50.0 (508)	5.1 (52)	8.1 (82)	16.4 (167)	7.9 (80)	10.6 (108)	48.1 (489)

Note: Missing data are not included in the table, thus percentages do not equal 100 and N's do not equal 1,016.

of their formal classification, all forms of prescription analgesics (narcotic and nonnarcotic) are potentially addictive and pose serious physical and mental risks to users. Despite these known dangers, the data in Table 10 show that over one-third of the pharmacists had used these medicines without a prescription.

Pain medications were not the only potentially addictive substances that pharmacists were using without a valid prescription. Other classes of drugs with substantial use numbers (Table 10) include muscle relaxants (13.8%), amphetamines (13.4%), benzodiazepines (8%), stimulants (6.1%), and cocaine (5.1%).

The onset of drug use has been a central theme of this dissertation. I have repeatedly argued that the process of being and becoming a pharmacist can affect the likelihood that an individual will begin to use drugs. Thus, the pharmacists were presented with a list of 10 prescription drug types/classes and asked to indicate when they first used the drug without an authorized prescription. Table 11 presents a percentage breakdown of when the drug users first began their illicit behaviors.

For 7 of the 10 drug types/classes in Table 11, the findings show that the largest proportion of initial use occurred after the individual entered pharmacy practice. A follow-up survey item shows that the majority stole the substances directly out of pharmacy stock. These findings support my earlier assertion that a pharmacist's access and knowledge seem to contribute to their illicit prescription drug use potential.

The only exception to the above onset trend were the stimulant-type drugs (cocaine, amphetamines, and "other" stimulants). Most respondents began using these three substances during college, most likely as study aids. In these cases, most individuals were given the drugs by an acquaintance. These findings lend support to a trend different

Table 11. When Drug Users Began Their Unauthorized Prescription Drug Use (%)

Drug Type/Class	Onset Period		
	Precollege	During College	Postcollege
Cocaine	38.9	29.6	31.5
Amphetamines	19.3	76.3	4.4
Other Stimulants	19.4	65.7	14.9
Barbiturates	42.3	19.5	38.5
Benzodiazepines	10.4	32.5	57.1
Narcotic Analgesics	13.5	20.3	66.2
Nonnarcotic Analgesics	22.5	17.9	59.6
Inhalants	33.3	23.8	42.9
Muscle Relaxants	3.5	12.8	83.7
Antidepressants	8.3	8.3	83.3

from that which emerged from the earlier analysis, namely that there is often considerable recreational and instrumental (i.e., study-aid) use of amphetamines in pharmacy schools.

The above discussion presents a statistical breakdown of the specific types and classes of prescription drugs that pharmacists are using. While these are important details, the thrust of the present analysis is concerned with pharmacists' illicit use of any form of prescription medication. Table 12 presents composite drug use totals derived by summing the reported use incidents from the 10 prescription drug categories described above.<sup>2</sup>

Notice that Table 12 organizes respondents into four generic drug use categories: nonusers (no reported use episodes), experimental user (1-4 use episodes), moderate use (5-10 use episodes), and high use (11 or more use episodes). These data show that 58.4% of the respondents have engaged in the illicit use of some type of prescription drugs.

Table 12. Pharmacists' Illicit Use of Any Potentially Addictive Prescription Drug (N = 959).

Level of Drug Use	Number of Respondents	Percent
Nonuser (0 episodes)	399	41.6
Experimental User (1-4 episodes)	248	25.9
Moderate User (5-10 episodes)	190	19.8
High User (11+ episodes)	122	12.7

Note: These data are based on the 959 cases in which the respondents provided the necessary drug use information (i.e., 57 missing cases)

Moreover, note that 32.5% of the respondents report 5 or more lifetime drug use episodes (moderate or high use) and 12.7% report more than 10 use episodes (high use).

Table 12 demonstrates that large numbers of pharmacists are using potentially addictive substances without first obtaining a prescription. Moreover, these drug use figures are comparable to the findings that have been revealed in past studies of practicing pharmacists (McAuliffe et al., 1987; Normack et al., 1985a).

#### Minimal Drug Abuse Education

The survey queried respondents about a number of issues specific to their pharmacy education. Most importantly, they were asked about their formal training on the psychological aspects of drug abuse. The responses show a remarkable lack of training in this area. One-third of the respondents (33%) reported that they received no drug abuse training while in college. Moreover, when training did occur, it was obviously conducted in a cursory fashion, as only 41.4% had a minimum of one full class lecture focused on the topic.

### Occupational Trends

#### Relaxed Dispensing Practices

A considerable amount of survey attention was focused on the attitudes and behaviors that are present in the pharmacy workplace. Several survey items revealed evidence of relaxed drug dispensing practices. For example, respondents were asked if they had ever worked with another pharmacist who was willing to dispense small numbers of dosage units to customers without a prescription (i.e., to tide them over until they could see a doctor). Almost 80% responded affirmatively. Moreover, a follow-up question found that only one-third of the respondents personally disagreed with these loose dispensing practices.

#### Permissive Attitudes Toward Self-medication

The survey data also suggest that pharmacists are exposed to supportive, positive coworker reinforcement with regards to self-medication practices. For example, when asked if they had ever worked with a pharmacist who condoned or accepted self-medication behaviors, almost two-thirds (64.9%) answered affirmatively. More importantly, 30% indicated that the individual was one of their supervisors.

#### Coworker Deviance

Several survey items queried respondents about the drug use or theft behaviors among their peers. The first item asked if they had ever worked with a pharmacist who had removed or dispensed prescription medicines without an authorizing prescription. Almost one-half (46%) answered affirmatively. Next, respondents were asked if they had ever witnessed another pharmacist ingest any form of prescription medicine without first

obtaining a prescription. Again, over two-fifths (42%) of the individuals offered an affirmative response.

There was also strong evidence to support my earlier assertion that pharmacists are very unwilling to take action against drug using peers. For example, 85.7% of the pharmacists who had witnessed drug use among their peers indicated that they took no action to report the incidents. This lack of response may, in part, be due to the fact that pharmacists have come to realize that reporting such behaviors is a useless course of action: in 47 of the 60 cases in which the pharmacist reported the incident, no action was taken against the violator.

#### A Lack of Drug Abuse Resources in the Pharmacy Workplace

It is quite possible that pharmacists do not report drug using peers because they feel ill prepared to deal with the problem. For example, respondents were asked the following question: "how well prepared are you to deal with a drug abusing pharmacist in your current work setting?" Response choices were structured in a nine point Likert-type format where 1 = "not at all prepared," 5 = "somewhat prepared," and 9 = "very prepared." A full 46.7% chose responses categories between one (1) and four (4). This suggests that almost half of the respondents had reservations about their ability to deal with a drug abusing peer.

These trepidations are undoubtedly linked to the fact that employers are providing pharmacists with limited educational and/or informational resources related to the problem of drug abuse. Almost two-thirds of the respondents (64.5%) indicated that their present employer offered them no educational or informational resources to deal with the problem

Collectively, the above occupational measures present a troubling picture of the pharmacy work environment. There is widespread evidence of loose dispensing practices. Significant numbers of respondent have worked with pharmacists who encourage or condone self-medication practices. Moreover, many respondents have worked with peers who use or steal drugs without detection or punishment. To make matters worse, pharmacy employers are offering pharmacists very little informational and/or educational resources to counter the undercurrent of prodrug use norms within the work environment.

### Professional Socialization Trends

The survey instrument queried pharmacists about numerous aspects of their professional socialization. Several of these items focused on their views of illicit prescription drug use. For example, the respondents were asked if they thought that it was sometimes acceptable for prescription medicines to be used for recreational purposes. Responses for this item were structured in a nine point Likert-type scale where 1 = "strongly agree," 5 = "neutral," and 9 = "strongly disagree." The pharmacists made it quite clear that they did not approve of recreational drug use: 871 respondents (86.2%) strongly disagreed with the statement and only 10 respondents indicated some level of agreement. Note that the almost unanimous disagreement on this item is likely to be a result of the abstract nature of the question. As is, the question does not have a targeted reference group (i.e., pharmacist's recreational drug use), thus it is likely to elicit views about recreational drug use among the general public. This item would have been much more useful had it asked specifically about pharmacist's recreational drug use.



The respondents were also asked about their views on self-medication. In particular they were asked if they thought that it was sometimes acceptable for a licensed pharmacist to self-medicate for a physical ailment without first obtaining a prescription. The responses were presented in the same nine point Likert-type format that was used for the recreational drug use item. Here, the data show a markedly different trend. Five (5) percent of the respondents strongly agreed with self-medication practices and almost one-third (28.2%) expressed some level of agreement with the practice.<sup>3</sup>

In an effort to isolate the source of more tolerant self-medication views, the pharmacists were asked about their beliefs in the therapeutic potential of prescription medicines. Namely, they were asked to indicate how confident they were that prescription medicines will produce positive therapeutic results for most physical conditions. A full 80% of the respondents indicated significant confidence in the healing potentials of prescription medicines

The above discussion presents a wealth of descriptive statistics about pharmacists' drug use behaviors. Moreover, I have described conditions associated pharmacists' educational, occupational, and professional experiences that potentially contribute to the onset and support the progression of drug use behaviors. However, to this point, all of the discussion and analysis has been founded on descriptive statistics and hypothesized relationships with drug use. At this time, I redirect the discussion to the results of an ordinary least squares (OLS) regression analysis that allow me to consider independent and combined effects that various social factors have on pharmacists' drug use.

### Ordinary Least Squares Regression

#### Operationalization

Dependent variable The principal outcome measure for this analysis was derived from the responses to question #39 of the survey instrument (Appendix C). This item presented respondents with a list of the following twelve drug types/classes: marijuana/hashish, cocaine, amphetamines, other stimulants, barbiturates, benzodiazepines, narcotic analgesics, nonnarcotic analgesics, inhalants, muscle relaxants, antidepressants, and antibiotics. The question asked respondents "how many times have you used each of the following substances without first obtaining a prescription?" They were offered the following response categories: never, once, twice, 3-5 times, 6-10 times, and 11+ times. In an effort to focus solely on pharmacists' use of prescription medications,<sup>4</sup> the marijuana/hashish use data was excluded from further analysis. The data on pharmacists' use of antibiotics was also excluded from the analysis. Antibiotics have no significant psychotropic effects and thus are of little interest to my inquiry. The descriptive statistics for this original drug use measure were presented above in Table 10 and Table 12.

An additive drug use index was constructed using the following data transformation process. The original response categories for each of the ten prescription medications were subject to the following numeric recoding: never = 0, once = 1, twice = 2, 3-5 times = 3, 6-10 times = 4, 11+ times = 5. Each of the 10 drug types/classes were then summed into one composite measure. This measure offers a rough estimate of the number of unauthorized prescription drug use episodes that the individual has experienced. The scores for this index ranged from zero (0) to 50 with a mean of 4.2.

There are several limitations to this outcome measure. First, due to the variable response intervals for the last three drug use response categories (i.e., 3-5 times, 6-10 times, and 11+ times), the resulting drug use measure may not accurately reflect the individual's actual number of use episodes. For example, if an individual indicates that he/she has used a drug type 6-10 times, this response will be assigned a numeric value of 4, when in actuality the individual used the drug nine (9) times. However, this recoding scheme will nonetheless produce an ordinal ranking drug use measure that allows me to distinguish between increasing levels of use. Second, there is no time interval associated with my drug use measure. Thus, I am unable to determine the recency of their drug use. This lack of a time interval also raises issues of measurement reliability. If the individual's drug use occurred many years before filling out the questionnaire, it is possible that they will be unable to accurately recall the actual number of drug use episodes.

Educational independent variables. Several educationally-based variables were considered for inclusion in the OLS regression analysis. The first item was the substance abuse education variable discussed above. The survey item queried respondents on their formal course work on the psychological aspects of drug abuse (question #15, Appendix C). The original coding offered the respondents seven (7) different response categories ranging from part of a class lecture to an entire college course. This item was recoded into a dummy variable where 0 = "no drug abuse course work" and 1 = "any drug abuse course work." The resulting distribution shows that 67% had no training while 33% were exposed to some level of drug abuse course work. I hypothesized that exposure to drug abuse education would decrease levels of drug use.

The questionnaire asked each respondent to report their class ranking at the time of graduation from pharmacy school. Subjects were offered the following response categories: 1 = "bottom one-third of the class," 2 = "middle one-third of the class," and 3 = "top one-third of the class." The distribution of responses to this item were as follows: 5.4% bottom one-third, 43.2% middle one-third, and 51.2% top one-third. The mean was 1.5. This measure offers a rough indication of the individual's academic success in pharmacy school. Bissell et al. (1989) found that the majority of the recovering drug dependent pharmacists she interviewed claimed to have done rather well in pharmacy school. I anticipate the same relationship in the present analysis.

The respondent's pharmacy degree status is the last educationally-based variable to be considered. Here, a broad range of pharmacy degree response categories (question #14, Appendix C) were collapsed into the following dummy coding. 0 = Bachelors degree in pharmacy and 1 = any post-Bachelors education in pharmacy. The data show that 85.8% held Bachelors degrees and the remaining 14.2% held some type of advanced pharmacy degree. This variable allows me to further explore the relationship between educational attainment and drug use. Specifically, it is expected that those individuals with more education will be more overconfident about their knowledge of prescription drugs and hence more prone to self-medicate.

Occupational independent variables. Three occupationally-based measures were considered. The first focused on the types of drug abuse information that are made available by their present employers. The survey item (question #17, Appendix C) offered a list of seven (7) different types of resources ranging from pamphlets and posters to participation in drug abuse conferences. This original measure was dummy coded using the following scheme: 0=no resources available and 1 = some resources available. As

mentioned above, 64.5% reported the absence of any job-based resources. This variable is expected to be inversely related to drug use.

Each survey respondent was asked to indicate if they had ever seen another pharmacist ingest any form of prescription medication without first obtaining a prescription. The responses were dummy coded 0 = "no" and 1 = "yes." The resulting distribution shows that 58% answered negatively and 42% answered affirmatively. The imitation and the social learning process should yield a positive correlation between this variable and the drug use outcome measure.

The final occupationally-based measure centers on the topic of role strain. Much has been written about the ways in which conflicting organizational goals impact upon pharmacists. The present study explores the relationship between occupational role strain and illicit prescription drug use among pharmacists. The measure of occupational role strain was derived by combining two separate survey items. The first item (question #26, Appendix C) reads as follows: "Pharmacists must negotiate roles as both health care provider and businessperson. What best represents the climate of your current work environment?" This item was accompanied by a nine-point Likert-type scale where 1 = "emphasis on business," 5 = "equal emphasis," and 9 = "emphasis on health care." A second question (#27, Appendix C) presented respondents with the same nine-point scale and asked them to indicate what type of job environment they prefer to work in. The issue of role strain was estimated by calculating the difference between these two (actual vs. preferred) job role measures. The resulting variable had a possible range of zero (0) to nine (9). Surprisingly, the respondents appear to be experiencing little job role strain. This is evidenced by a mean of 1.9 for this variable. Moreover, a full 25% reported no role

strain whatsoever. Increased job role strain scores should produce higher levels of drug use.

Professional independent variables Several aspects of the professional socialization process were considered. Each of these variables were discussed at length above. The first was a measure of pharmacists' attitudes toward recreational drug use. A survey item (question #30, Appendix C) asked respondent: "Do you agree or disagree: It is sometimes acceptable for prescription medications to be used for recreational purposes?" A nine-point Likert-type response format was used where 1 = "strongly disagree," 5 = "neutral," and 9 = "strongly agree." The vast majority of the respondents (86%) were in strong disagreement with the recreational use of prescription drugs. The mean for this variable was 1.2.

The measure of attitudes toward pharmacists' self-medication practices was used as the second profession-based variable. Here, respondents were presented with the same response format but asked if they thought it was "sometimes acceptable for a licensed pharmacist to self-medicate for a physical ailment without first obtaining a prescription." Unlike the recreational drug use measure, this item had a varied response distribution with a considerable proportion of pharmacists approving of self-medication practices. The mean for this variable was 3.8. I expect that permissive attitudes toward self-medication should correlate positively with higher drug use.

The third professional socialization variable focuses on pharmacists' general perception of prescription medications.<sup>5</sup> They were asked to indicate how confident they were that "prescription medicines will produce positive therapeutic results for most physical conditions." The response choices were structured in a nine point Likert-type

format where 1 = "not at all confident," 5 = "somewhat confident," and 9 = "totally confident." The reported mean for this item was 7.4. Increased confidence in medications should make pharmacists more prone to drug use.

The final professional socialization measure focuses on the issue of pharmacists' dispensing norms. A survey item (question #28, Appendix C) asked respondents if they agree or disagree with the following statement: "it is acceptable for a licensed pharmacist to occasionally dispense a prescription dosage unit to a loyal customer or family member to 'tide' them over until they can obtain a doctor's prescription." This question was accompanied by a nine-point Likert-type response format where 1 = "strongly disagree", 5 = "neutral", and 9 = "strongly agree". The mean response was 5.5. Moreover, 9 (strongly agree) was the modal response choice. Relaxed dispensing norms should be positively related to the dependent variable.

Control variables. Two control variables were included in the multivariate analysis of the survey data. A gender measure, coded zero for female and one for male, was the first control variable. The distribution of this variable was as follows: 50.3% female and 49.7% male. The decision to include this variable was based on a long line of drug use research that showing that males are more prone to drug use than women. The second control variable was concerned with the year in which the individual attained his/her Bachelor's degree in Pharmacy (range 1934 to 1997). Recognizing that professional drug dispensing norms and societal drug use norms have grown continuously more conservative in the 1980's and 1990's, I decided that it was important to include information on the time period in which their early professional socialization took place. A dichotomous variable was constructed where a value of zero equals a graduation date of 1980 or later and a

value of one equals a pre-1980 graduation date. The data show that 55.9% of the respondents graduated during the recent, more conservative era of the 1980's and 1990's and 44.1% graduated prior to 1980.

### Zero-order Correlations

The zero-order correlations for each of the above variables are presented in Table 13. Due to space constraints, note that each of the independent variables was assigned a numeric label between 1 and 12. The correlations data for the dependent variable can be found in the row numbered 13. The means and standard deviations for each variable are also included at the bottom of the table

The correlation coefficients in Table 13 show that seven of the 12 independent variable are significantly related (at the .01 level) to the dependent variable, namely, the drug abuse education variable, the peer drug use variable, the job role strain variable, the views on self-medication variable, the dispensing norm variable, the gender variable, and the graduation date variable. Several of these variables, such as the views on self-medication variable, exhibit very strong correlation coefficients.

The vast majority of the correlations are in the expected direction. For instance, a positive correlation for the self-medication variable suggests that, as attitudes toward self-medication become more relaxed, involvements in drug use increase. There are, however, a few unexpected exceptions. Referring to Table 13, notice that there is a negative and significant correlation between the job role strain variable and reported levels of drug use. This suggests that increased disjuncture between occupational aspirations and realities (business vs. health care roles) produce decreases in drug use. I offer two explanations for this unexpected finding. The first focuses on measurement issues. The above described



Table 13. Zero-order Correlations, Means, and Standard Deviations (N = 927).

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1.0												
2	-.02	1.0											
3	.03	.12*	1.0										
4	.03	-.05	.05	1.0									
5	-.01	-.05	.04	-.07	1.0								
6	.07	.02	.01	.02	-.05	1.0							
7	.02	-.01	.05	.00	.05	.02	1.0						
8	-.11*	-.03	.09*	-.05	.26*	-.03	.11*	1.0					
9	-.02	.03	-.02	-.08	-.02	-.08*	-.09*	-.00	1.0				
10	-.01	-.02	.01	-.02	.14*	.03	.07	.30*	-.03	1.0			
11	.20	.06	.00	-.09*	-.03	.08	-.02	-.19*	-.02	-.05	1.0		
12	-.36*	-.01	-.02	.05	.05	-.15*	.01	.19*	.07	.01	.48*	1.0	
13	-.18*	-.07	.05	-.05	.28*	-.09*	.06	.51*	.03	.17*	-.28*	.28*	1.0
X	.68	2.45	.13	.35	.41	1.88	1.24	3.74	7.43	5.46	1.52	15.86	4.18
SD	.47	.60	.34	.48	.49	1.73	.84	2.62	1.29	2.83	.50	13.41	6.17

\* Significant at p-value of .01

## Variables

- 1 = drug abuse education  
 2 = class rank  
 3 = degree level  
 4 = job-based drug abuse training  
 5 = peer drug use  
 6 = role strain

- 7 = views on recreational drug use  
 8 = views on self-medication  
 9 = belief in medications  
 10 = relaxed dispensing  
 11 = gender  
 12 = graduation date  
 13 = drug use index (DV)

variable is far from an ideal measure of job role strain. The variable was constructed by calculating the difference between two nine point Likert-type attitudinal survey items. Scholars (Babbie, 1973, Blumer, 1988, Frankfort-Nachmias & Nachmias, 1996) have criticized this measurement format on several grounds. Studies have shown that survey participants tend to choose response categories toward the middle of the nine point continuum, thus low variance. In fact there are signs that the role strain variable is not very robust measure. A mean of 1.88 out of a possible scale of 9 shows that this procedure yielded low estimates of role strain. A full 83% of the respondents registered role strain scores of less than three. However, given the fact that past research (Quinney, 1963) has shown job role strain to be an important factor in pharmacists' deviance, I decided to include it in the multivariate analysis.

Similarly, the findings from the interview component found little evidence of job role strain among recovering pharmacists. Moreover, there seemed to be no discernable link between job role strain and pharmacists' drug use. Thus, it is possible that we need to reject the idea that job role strain is a contributing factor to pharmacists' deviance. For example, it is possible that Quinney (1963) has overstated the significance that role strain plays in pharmacists' workplace deviance. Perhaps the evolving landscape of pharmacy practice has altered the ways that pharmacists experience and/or react to job role strains. It is also possible that job role strain nowadays has little or no impact on pharmacists' involvements in drug related deviance. The use or theft of prescription medicines is an serious trust violation that may not be affected by frustrations over perceived job roles.

The job role strain measure was not the only variable to display an unexpected zero-order correlation. Referring back to Table 13, notice that there is a negative

correlation between the class rank variable (#2) and the drug use outcome measure (#13). The survey data suggest that there is a slight inverse relationship between class rank and drug use. While I did not expect a strong relationship between these two variables, I did expect a positive coefficient. This expectation was based on Bissell's (Bissell et al., 1989) interview research showing that recovering pharmacists tend to be above average students.

Given that the Bissell study did not include a control group of nonrecovering pharmacists it is likely that the nature of the association was overstated. Just over one-half (51.2%) of the survey respondents claim to have graduated in the top one-third of their pharmacy school class. Thus, it is understandable that Bissell would find large numbers of academically successful individuals within her sample of recovering pharmacists.

Overall, the zero-order correlations in Table 13 are interesting. They suggest that several of the social factors may have a significant impact on drug use behaviors. Moreover, the lack of significant zero-order correlations among the 12 independent variables demonstrate that multicollinearity should not be a problem in the multiple regression modeling. In fact, there are one only three (3) coefficients that exceed .25.

#### Multiple (OLS) Regression Results

The results of the multiple regression (Table 14) provides considerable support for my assertion that social factors can be used to predict pharmacists' drug use behaviors. Specifically, Table 14 reports the multiple correlation coefficient ( $R = .581$ ). The resulting  $R^2$  coefficient indicates a statistical model wherein the combined effect of the independent variables accounts for 33.8% of the variance in the dependent variable.

Educational findings. There are several noteworthy aspects of the three educational variables presented in Table 14. The negative and significant slope coefficient for the drug abuse education variable suggests that exposure to substance abuse course work has a meaningful impact on pharmacists' illicit prescription drug use behaviors. More importantly, the corresponding beta weight (-.072) illustrates that this variable is the fifth strongest in the model

The other two educational variables offer mixed results about the relationship between educational attainment and drug use. The slope coefficient for the class rank variable remains weak and negative. This suggests that, opposite of my prediction, controlling for the net effects of the other variables, higher ranked students (compared to peers) are slightly less likely to engage in illicit prescription drug use. Conversely, the weak and positive coefficient for the college degree variable suggests that pharmacists with a post bachelors education are slightly more likely to use drugs. While neither of these variables have any significant effect on the dependent variable, the conflicting nature of their interpretations suggests that educational attainment alone has little consistent impact on pharmacists drug use behaviors. This should not come as a surprise. While past researchers have noticed trends in college degree and ranking levels in recovering pharmacists, my findings indicate that such influences all but disappear in a sample that includes individuals with diverse drug use histories.

Occupational socialization findings. The regression results for the three (3) occupationally-based independent variables (Table 14) indicate that only exposure to drug using peers has a noticeable effect on dependent variable. Neither access to drug abuse resources nor job role strain, has any significant effect on drug use. Moreover, the job role

Table 14. Multiple Regression Results (N = 883).

Independent Variable	Dependent Variable: Addictive Prescription Drug Use Index			
	Slope Estimate	Standard Error	Beta	Sign. Level
Educational Variables				
Drug Abuse Education	-.953	.398	-.072	.010
Class Rank	-.484	.288	-.047	.093
Degree Level	.181	.510	.010	.724
Occupational Variables:				
Coworker Drug Use	1.881	.361	.150	.000
Drug Abuse Resources	-.415	.363	-.032	.253
Job Role Strain	-.147	.100	-.041	.144
Professional Variables:				
Self-medication Views	.949	.072	.404	.000
Recreational Use Views	.173	.208	.023	.404
Belief in Meds	.060	.134	.013	.655
Dispensing Norms	.026	.063	.012	.682
Control Variables:				
Gender	-1.640	.393	-.133	.000
Graduation Date	1.366	.419	.110	.001
Intercept	3.19	1.54		.038
Multiple R	= .581			
R <sup>2</sup>	= .338			
Standard Error	= 5.06			

strain coefficient continues to show an inverse relationship between reported role strain and the occurrence of drug use

Professional socialization findings. As Table 14 shows, views toward self-medication is the only one of the four professional socialization variables that has any significant predictive effect on drug use behaviors. In fact, its corresponding beta weight (.404) indicates that this is the single most predictive variable in the regression equation.

The remaining three professional socialization measures (Table 14), namely, views on recreational drug use, belief in the therapeutic effects of prescription medications, and dispensing norms, have minimal impact on the dependent variable. However, on a more positive note, all three of these relationships are in the expected direction.

I offer separate explanations for each of these nonsignificant professional socialization measures. The lack luster performance of the views on recreational drug use variable is quite obvious--this variable suffers from an extremely constrained variance. One can hardly expect significant results from a Likert-type attitude measure when 95% of the respondents indicate strong disagreement and only 10 of the 1011 respondents expressed any level of disagreement.

The measure of pharmacists' confidence in the therapeutic effects of prescription medicines also suffers from a constrained variance. In particular, a full 90% of the respondents chose points six through nine on the nine point Likert-type continuum. Unfortunately, this across-the-board expression of strong confidence in the "tools of a pharmacist's trade" makes it difficult to assess the subtle effects that this variable might have on drug use behaviors. Moreover, it is unlikely that this issue could be resolved by different measurement techniques. Pharmacists are simply unlikely to waver on this core

issue and voice low respect for the same prescription medications that define their professional identity

There are two possible explanations for the lack of significance of the dispensing norms variable. The first explanation focuses on measurement issues. Repeated written comments in the margins of the questionnaire suggest that pharmacists had difficulty with the wording of this survey item. In particular, they did not like the abstract nature of the statement which read:

Do you agree or disagree: It is sometimes acceptable for a licensed pharmacist to occasionally dispense a prescription dosage unit to a loyal customer or family member to "tide" them over until they can obtain a doctor's prescription?

Their margin comments suggest that they wanted more detailed information about the type of medication and the circumstances surrounding the situation. This lack of clarity caused a measurement error problem which undoubtedly undermined the predictive potential of this variable

The second explanation strikes at an even more fundamental problem. Namely, it is unlikely that one could ever construct a single survey item that could adequately assess pharmacists' dispensing norms. The intricacies of how and why pharmacists choose to accommodate desperate patients is very complex and situationally-based, thus lending themselves to a more conversational inquiry format.

Control variable findings The findings in Table 14 demonstrate that both of the control variables have a significant predictive effect on the dependent variable. In particular, the regression results confirm that males are much more likely to report in illicit

prescription drug use than females. This should come as no surprise given that almost every other study of drug use among pharmacists has shown a similar trend.

The significant and positive coefficient for the date of graduation variable is also noteworthy. This result suggests that pharmacists graduating from pharmacy school prior to 1980 are more likely to use drugs than their younger contemporaries. Evidence of evolving conservatism in the pharmacy profession has been consistently linked to lower drug use trends in each of the three data sources employed in the present study.

The data in Table 14 are generally supportive of my previously reported findings. Where robust measures were available, I was able to demonstrate that educational, occupational, and professional factors have a significant predictive effect on pharmacists' drug use behaviors. While some might suggest that I exclude these weaker measures from my final analysis, I chose to include them in the larger discussion. Note, however, that a smaller regression equation was constructed which only included the five most predictive variables (i.e., statistically significant at the .01 level) from the larger model. These results are presented in Table 15. One can see from both the correlational data and the measure of explained variance that this exercise in model reduction had little impact on the predictive effects of these strongest social factors.

### Logistic Regression Analysis

The summed drug use index that was used as the outcome variable in the above OLS regression analysis was significantly skewed. Specifically, 41.6% of the respondents reported no episodes of illicit prescription drug use in their lifetime and 67.5% reporting fewer than five usage episodes. Given that OLS regression may not adequately model the



Table 15. Multiple Regression Results—Reduced Model (N = 937).

Independent Variable	Dependent Variable Addictive Prescription Drug Use Index			
	Slope Estimate	Standard Error	Beta	Sign. Level
Drug Abuse Education	-.891	.383	-.067	.014
Coworker Drug Use	2.062	.350	.163	<.001
Self-medication Views	.979	.067	.413	<.001
Gender	-1.603	.383	-.129	<.001
Graduation Date	1.417	.405	.113	<.001
Intercept	2.110	.811		.009
Multiple R	= .577			
R <sup>2</sup>	= .333			
Standard Error	= 5.09			

relationship in such cases, I chose to supplement the above analysis with logistic regression analysis.

Logistic regression is a statistical techniques that allows researchers to assess the extent to which a set of independent variables can predict a dichotomous dependent variable (Feinberg, 1977). Thus, once I collapsed the drug use index into two dichotomous contrasts I was able to use this statistical procedure to assess the unique and combined effects of the various independent variables have on illicit prescription drug use outcomes among pharmacists. I began by creating a new outcome variable that divided the survey respondents into two groups, one containing those individual with no reported drug use and another containing those individuals who reported at least one illicit drug use

episode (coded 0 and 1 respectively). By regressing this new "use versus nonuse" outcome measure on the same twelve variables that were considered in the OLS regression above (See Table 14), I am able to determine the unique and combined effects that these predictor variables have on pharmacists' drug use.

Recognizing that there may be different dimensions to occasional, experimental illicit prescription drug use as opposed to continued, extensive illicit prescription drug use, I also constructed a second dichotomous contrast. Here, I focused just on the drug using pharmacists (those 520 coded 1 in the previous dichotomous variable) dividing them into two groups: one containing individuals who reported less than five use episodes in their lifetime and another with individuals reporting 5 or more use episodes. This variable offered me an opportunity to consider the independent and net effects that predictor variables have on two substantively different levels of drug use, conditional on having used prescription drugs illicitly.

By dividing the dependent variable into two separate dichotomous measures and then regressing each on the same series of independent variables, I am able to avoid the statistical complications associated with a skewed drug use measure expressed as a continuous variable. At the same time, this analysis plan allows me to consider differences that might exist between different levels of drug users (experimental versus, more than experimental use). This type of logistic regression application is referred to as a "continuation ratio." With this coding, the two dichotomous contrasts are independent (Feinberg, 1977).

Table 16 provides the results of the continuation ratio logistic regression analysis. The first panel of Table 16, labeled "Model 1," presents the regression coefficients,

Table 16 Continuation Ratio Logistic Regression Results

Independent Variable	Model 1 (N = 927)		Model 2 (N = 520)	
	B (S.E.)	Odds Ratio	B (S.E.)	Odds Ratio
Educational Variables:				
Drug Abuse Education	.030 (.088)	1.03	.125 (.114)	1.15
Class Rank	.044 (.132)	1.04	-.146 (.172)	.87
Degree Level	-.216 (.112)	.81	-.271 (.147)	.76
Occupational Variables:				
Coworker Drug Use	-.394* (.080)	.67	-.327* (.105)	.72
Drug Abuse Resources	.074 (.084)	1.08	.143 (.112)	1.15
Job Role Strain	-.029 (.075)	.97	-.099 (.063)	.91
Professional Variables:				
Self-medication Views	.329* (.033)	1.39	.360* (.047)	1.43
Recreational Use Views	.046 (.092)	1.05	-.139 (.123)	.87
Belief in Meds	.019 (.062)	1.02	.055 (.085)	1.06
Dispensing Norms	.037 (.029)	1.04	.054 (.063)	1.06
Control Variables				
Gender	.342* (.088)	1.41	.346 (.116)	1.41
Graduation Date	-.251* (.092)	.78	-.297* (.122)	.74
Intercept	-1.891 (.624)		-1.931 (.843)	
Initial -2 log likelihood		1257.7		715.3
Model -2 log likelihood		986.8		570.2
Pseudo R <sup>2</sup>		.215		.203

\* Significant at .01 level

standard errors, and odds ratios for a logistic regression model including the 12 independent variables and the use versus nonuse dependent variable. Notice that this model contains 927 respondent pharmacists. The far right panel of Table 16, labeled "Model 2," provides summary data for a second logistic regression model that contains only those 520 pharmacists who reported some level of lifetime illicit prescription drug use. The dependent variable in this model, coded zero for experimental use (1-5 episodes) and one for more than experimental use (5+ episodes) was again regressed on the same 12 independent variables. The resulting regression coefficients, standard errors, and odds ratios are provided.

I have provided summary data at the bottom of Table 16 that can be used to evaluate the goodness of fit for each of these two logistic regression models. First, consider the initial and model -2 log likelihood statistics for each model. A chi-square test of the difference between the initial (intercept only) and model (intercept plus 12 predictor variables) -2 log likelihood statistics serves a similar function as the F-test in OLS regression. That is, it tests the null hypothesis that the coefficients for all of the variables in the model, except the intercept, are zero. Clearly, the improvement in the -2 log likelihood statistics for both Model 1 (267.9) and Model 2 (145.1), with 12 degrees of freedom, result in statistically significant chi-squared tests.

Satisfied with the fact that both models have some effect on the dependent variable, the next step is to evaluate the goodness of fit of the models. There are several ways to achieve this goal in logistic regression. I chose to focus on two. First, I refer the reader to the pseudo  $R^2$  statistics for both of the models. This statistic is derived by dividing the difference between the initial and model -2 log likelihood statistics (i.e., the

model chi-square value) by the initial -2 log likelihood statistic. In OLS regression, the  $R^2$  statistic is derived from the multiple correlation coefficient and offers specific information about the total explained variance of the regression model. In logistic regression, there is no multiple correlation coefficient, thus the model chi-square statistic is used to generate a "pseudo  $R^2$ " statistic. This statistic offers the reader a rough approximation of the model's fit. Referring to the bottom of Table 16, note that the 12 independent variables account for roughly 21.5% of the variance in the user versus non-user dependent variable (Model 1) and roughly 20.3% in the experimental versus more than experimental prescription drug use dependent variable (Model 2)

The goodness of fit in a logistic regression model can also be assessed by referring to the classification table that compares the predicted outcomes of the model to the observed outcomes generated by the model. While these data are not presented in table form, note that Model 1 correctly predicted 74.4% of the 927 cases and Model 2 correctly predicted 71.9% of the 520 cases. Both of these percentages suggest that the models do a reasonable job in predicting the values of their corresponding dependent variable

The logistic regression coefficients presented in Table 16 suggest that, net the influence of all other variables, coworker drug use, views of self-medication, gender, and graduation date have a significant, unique predictive effect on both the user versus non-user dependent variable and the experimental versus more than experimental prescription drug use dependent variables. When referring to the regression coefficients, note that variation of dummy coding known as a "parameter coding system" (1,-1) was used for each of the dummy coded independent variables, namely, degree level, co-worker drug use, and graduation date variables.<sup>6</sup>

The only significant difference between the results of the continuation ratio logistic regression (Table 16) and the OLS regression (Table 14) is in the drug abuse education variable. The logistic regression analysis suggests that a lack of drug abuse education has statistically insignificant effects on both use versus non-use decisions and experimental versus more than experimental drug use choices. Referring to Table 16, note that the regression coefficient for this variable is higher in model 2 (.125) than it is in model 1 (.030). This suggests that a lack of drug abuse education affects levels of illicit prescription drug use more than abstinence versus use decisions. In fact, a logistic regression model where the dependent variable was coded non-use versus high use (11+ episodes), this drug abuse education had a statistically significant, predictive effect.

Referring to Table 16, notice that the measure of attitudes toward self-medication continues to have the strongest predictive effect of all 12 independent variables. Moreover, there is little change in the regression coefficients across the two models suggesting that positive attitudes toward self-medication are strongly associated with all levels of drug use. The odds ratio for this variable offers additional insight into the strength of the relationship between self-medication views and illicit prescription drug use. In the first model (use versus nonuse dependent variable), the odds ratio is 1.39. This means that, when all other variables are at their mean, a one unit progression on the nine-point self-medication continuum increases the odds that an respondent pharmacist will use drugs by a factor of 1.39. Thus, by extrapolation, those pharmacists who strongly agree with self-medication practices (i.e., coded 9) are 12.5 times more likely to engage in illicit prescription drug use than those pharmacists who strongly disagree with self-medication practices (i.e., coded 1). Notice that the odds ratio of 1.43 yields a similar

(12.9.1) interpretation for a dependent variable coded 0 for experimental prescription drug use and one for more than experimental prescription drug use.

The results of this continuation ratio logistic regression analysis offer important support for the present study. First, this analysis substantiates the findings of the OLS regression by reproducing almost the same statistical relationships in a three-category coding scheme. More importantly, this analysis suggests that issues such as exposure to drug abuse education have a differential effect on heavy drug use than it does on initial, or experimental drug use decisions.

### Summary

The results of the multiple regression analysis offer encouraging support for my original theoretical propositions. In particular, the data show that social factors can be used to predict levels of drug use involvement in practicing pharmacists. The findings substantiate my claim that mixed signals at the educational, occupational, and professional levels foster a sense of benign faith in the power of prescription drugs. Armed with positive reinforcement and an intimate familiarity with the safety of these drugs, pharmacists come to believe that they are immune from the dangers of drug abuse. Nowhere is this observation more evident than in the self-medication variable. The data in both Table 14 and Table 15 clearly show that pharmacists' attitudes toward the acceptability of self-medication has a strong predictive effect on their drug use behaviors.

The data in Table 17 offers a graphic representation of the association between pharmacists' views of self-medication and their involvements in illicit prescription drug use.<sup>7</sup> The clear relationship between these two variables is evidenced by a corresponding

correlation coefficient of .57. Namely, the data show that permissive attitudes toward self-medication are strongly related to increased levels of illicit prescription drug use.

Table 17. Relationship Between Attitudes Toward Self-medication and Self-reported Illicit Prescription Drug Use Behaviors ( N = 958)

Number of Illicit Drug Use Episodes	Views of Self-medication			Totals
	Disagree	Neutral	Agree	
0	81.0 (323)	15.8 (63)	3.3 (13)	100.1 (399)
1-4	49.8 (123)	36.4 (90)	13.8 (34)	100.0 (249)
5-10	25.3 (48)	41.6 (79)	33.2 (62)	99.9 (190)
11+	13.1 (16)	27.9 (34)	59.0 (72)	100.0 (122)

On the surface, this strong relationship seems to suffer from "sociology of the obvious"—of course drug users have permissive attitudes toward drug use. However, this hasty generalization must be tempered by the results from the previous two data sources. Both the interview and archival inquiries found evidence to support the assertion that relaxed views toward self-medication are a chief contributing factor in pharmacists' drug use behaviors. For those who remain unconvinced of the pervasive support of the practice of self-medication, consider the following unsolicited letter that was attached to one of the survey questionnaires:

I am pleased to participate in your survey which is well intentioned and likely to secure information which has the capability to do some good in an area that is of deep concern to all of us. Permit me to make an observation which was of concern to me as I responded. There appeared to be [an]



implicit [assumption] in a number of question the suggestion that the use of legend [prescription] drugs by a pharmacist without a prescription is illegal, immoral, and possibly consistent with the conclusion that such use constitutes wrongdoing that requires condemnation and remediation. Unless I am missing the point (and my answers reflected this point of view), a pharmacist's experience in the use of medication, his knowledge of various disease processes, and his unique insight into his own medical situation sometimes makes it entirely appropriate for him, within reasonable limits, to self-administer small amounts of medication to deal with a problem which is likely to be ameliorated by such action. Nothing in my attitude is intended to condone or encourage the use of drugs for recreational or mind altering purposes. I am not speaking of removing controlled substances from stock and falsifying records to conceal such ill-conceived activity. I am talking of the prudent, cautious, and judicious use of medications, which are not stolen--but paid for as is other merchandise removed from the store. In my own case, I have successfully used antibiotic eye drops for a case of conjunctivitis, Flexeril for muscle spasms, Keflex for an infection, etc. These are rare occurrences but are in my judgment not inconsistent with the sound, appropriate, and legal practice of pharmacy. Your questions did not appear to make provision for such action. I think a sharp line of delineation should be drawn between such action and the activity that we all condemn--recreational, experimental, mind altering drug use which involves theft, drug diversion, record altering activity which should be condemned and eliminated.

With best wishes for the success of your project,

A Fellow Pharmacist

P.S. In my 39 1/2 years of practice, most of the colleagues I have worked with have acted in a manner similar to the one I have described.

### Notes

1. Note that there was no time interval associated with this drug use measure. Thus, the data represent estimates of lifetime drug use. This lack of a time interval raises issues of measurement reliability. If the individual's drug use occurred many years before filling out the questionnaire, it is possible that they will be unable to accurately recall the actual number of drug use episodes.

2. The data on marijuana/hashish use and antibiotic use were excluded from the overall drug use data presented in Table 12. As such, these data represent the combined number of use episodes from the following list of addictive substances: cocaine, amphetamines, other stimulants, barbiturates, benzodiazepines, narcotic analgesics, nonnarcotic analgesics, inhalants, muscle relaxants, and antidepressants.

3. Those pharmacists whom I describe as displaying "some level of agreement" chose a response choice between six (6) and nine (9)

4. Note that the cocaine and inhalant drug categories can potentially include prescription as well as nonprescription drug use. That is, it is conceivable that a pharmacist could have access to and use both pharmaceutical grade cocaine as well as "street" cocaine. Also, a pharmacist could have access to and use prescription inhalants as well as nonprescription inhalants such as industrial chemicals, glue, paint, etc. However, since there is no way for me to distinguish between these subtle categories, I have chosen to and treat them as prescription drug use measures thus include these two measures in the subsequent analysis.

5. Respondents were asked to assess their belief in medicines at three different points in their pharmacy career: at present, during their earliest pharmacy work experience, and during pharmacy school. The data show evidence of decreasing confidence over the course of one's pharmacy career. Nonetheless, the measure of one's attitudes during their first pharmacy work experience was used for the analysis. This item offers the most sound measure since an individual's present attitudes may be largely a function of their career length.

6. Under the parameter coding scheme, data were coded as follows. Exposure to drug abuse education=1, absence of drug abuse education=-1. Respondents with a bachelor's degree are assigned a value of 1 and those with postbachelors work are assigned a -1. No exposure to drug using peers=1 while exposure to drug using peers=-1. A lack of employer provided drug abuse resources is coded 1 and a the presence of employer provided drug abuse resources is coded -1. Male respondents are assigned a value of 1 and females receive a value of -1. Finally, a post-1980 graduation date is coded 1 and a pre-1980 graduation date is coded -1. When this type of coding scheme is used, a negative regression coefficient (see Table 16) suggests that the likelihood of drug using behaviors increases (i.e., value of 1 for the dependent variable) when the a parameter coding of -1 is present. For example, exposure to drug using peers (coded -1) is shown to have a significant predictive affect on the pro-drug use behaviors in both logistic regression models (coefficients of -.394 and -.327 respectively). Also note that the resulting coefficients and odds ratios represent one-half of the actual effect of the variable (i.e., a coefficient of -.394 means that the presence of the variable produces a .788 change in the outcome variable).

7. The drug use data are presented in the same form as in earlier tables. However, for the purposes of this illustration, the self-medication variable has been truncated. A generic "disagree" category was created by merging responses 1-3 into one group. The "neutral" category contains only those cases where a the response choice 5 was indicated. Finally, the "agree" category was created by collapsing responses 6-9 into a single group.

## CHAPTER VIII

### SUMMARY AND IMPLICATIONS

This study's multi-method research design has allowed me to approach the problem of illicit prescription drug use among pharmacists from several perspectives. I conducted 50 interviews with recovering drug abusing pharmacists. I reviewed 89 drug related loss prevention apprehension reports obtained from the corporate case files of two major retail pharmacy chains. Finally, I analyzed data (N = 1,016) obtained via a self-administered, anonymous, mailed national survey of practicing pharmacists. Collectively, comparing the multiple sets of findings from this study offers considerable insight into the nature and dynamics of the unauthorized drug use of pharmacists.

#### Limitations of the Research

The conclusions from this study must be qualified by important caveats. For example, several limitations in the methodology significantly limit my ability to draw causal conclusions from these data. First, all of the data in this study are cross-sectional in nature. Moreover, all three data collection efforts rely on retrospective accounts of past behaviors. This poses serious temporal ordering problems. Specifically, the post hoc nature of these data leave me unable to determine if reported attitudes and behaviors existed prior to the individual's illicit prescription drug use behaviors or if they reflect the

individual's post-deviance constructions of past situations or if they merely reflect the individual's post deviance constructions of events

The interview data are especially vulnerable to this temporal ordering criticism. All of the pharmacists that I interviewed were well into their drug abuse recoveries when I spoke with them. In every case the individual already had some level of exposure to a twelve-step treatment program. These programs indoctrinate their neophyte members with an exclusively medical model conception of drug and alcohol abuse. For example, "step one" of an Alcoholics Anonymous or Narcotics Anonymous protocol calls for the individual to admit that he/she is powerless to control his/her chosen form of mind altering substance. Several constructionist oriented scholars (Alasuutari, 1992; Denzin, 1987; Rudy, 1986) have documented how the structure and content of twelve-step programs significantly shape the way recovering individuals think and talk about their past drug or alcohol use, attitudes, and behaviors. To this end, the interviewees' exposure and willing participation in these groups will undoubtedly affect the way they "tell their story." I found this tendency to be widespread among my interviewees. When the recovering pharmacists were left to direct the flow and content of the interview, they often spoke about how factors such as their early childhood experiences or a high incidence of drug and/or alcohol abuse within their immediate family helped shape their own personal drug abuse. However, in every such occasion, I consistently shifted the focus of the conversation and asked the individuals to consider the ways in which various social factors were related to their drug abuse history. I found this strategy to be especially successful at getting the interview respondent to speak freely and candidly about a variety of issues

While I made every effort to force the interviewees to reflect upon how various social factors impacted their past illicit prescription drug use, there is no way to determine the extent to which their involvements in twelve-step programs shaped the nature of their interview accounts. One possible remedy for this situation would be to identify and conduct interviews with pharmacists who are either currently beginning to use drugs or have recently come forward or been apprehended for their drug use and compare the nature and content of their untainted accounts.

These interview data are an important source of uncompromised information about pharmacists' drug use in that 27 of the 50 interviewees voluntarily entered drug treatment. Coming forward with a drug problem is usually preceded by long periods of introspection in which the individual is able to arrive at their own conclusions about how and why he/she entered into a downward spiral of addiction. These individuals are usually less willing to uncritically accept the predominantly medical model explanations for their situation that they are exposed to in a twelve-step program.

The archival examination of corporate loss prevention apprehension records are also subject to data limitations. First, the apprehension records represent the interpretations and constructions of corporate loss prevention officials. Thus, there is a possibility that the recorded information is more a reflection of the predominant policies and prejudices of the corporation than it is of the details of a given investigation. While I was unable to identify any noticeable patterns of bias or prejudice in the apprehension reports, this concern is inherent in this type of officially detected archival data.

The loss prevention records focus solely on the drug-related behaviors of apprehended pharmacists. There is a longstanding debate within the criminological

discipline about the dangers associated with generalizing from apprehension data (Black, 1970). Admittedly, apprehension data include only those individuals who have been caught and acted upon by social control officials. Some have argued that apprehended offenders represent only the most inept members of the criminal element and thus are not representative of the larger population. Studies that rely solely on apprehension data run the risk of confusing the study of deviant behavior with the study of the apprehension and processing of deviant behavior. However, Hindelang et al (1979), and many others, have been able to empirically demonstrate that official apprehension data do not differ substantially from self-report data on deviant behavior.

Moreover, the present study attempts to make additional efforts to address this potential problem by relying on multiple data sources. By posing the same research questions across three separate groups of drug using pharmacists, I am able to identify consistent relationships and better support my findings.

In the coming pages, I will summarize those relationships that I was able to identify consistently among the three data collection components of this study. In doing so, I will argue that a series of social factors are repeatedly present among drug using pharmacists. However, it is important to acknowledge that many of these same social factors are also present among those pharmacists who do not engage in illicit prescription drug use. For example, all three data sources suggest that exposure to drug using mentors is associated with personal illicit prescription drug use. However, these same mentors undoubtedly expressed the same views and behaviors to many other pharmacists who never followed in their mentor's deviant footsteps. To this end, the reader must realize that the forthcoming discussion is intended to identify social factors that potentially contribute

to or facilitate illicit prescription drug use among pharmacists. Thus, my propositions are not intended as "causal" statements. Instead, I will attempt to identify what I see as "warning signs" that the data suggest are consistently associated with pharmacists' illicit prescription drug use. While the triangulated research methodology of the present study adds to the consistency of these relationships, they are not sufficient to infer causality.

### Drug User Demographics

The findings of this study suggest that there are several demographic characteristics that set drug using pharmacists apart from the larger professional pharmacist population. In Table 18, I compare the demographic profile of the detected drug using pharmacists in each of the three samples to the general population of U.S. practicing pharmacists. Given the fact that the survey instrument asked individuals about lifetime drug use, I have only included data on the 312 pharmacists who reported five (5) or more episodes of prescription drug use.<sup>1</sup> The far right column of Table 18 presents demographic data for the entire population of U.S. pharmacists.

Notice that over three-fourths of the drug using pharmacists in the personal interview, archival apprehension report, and survey samples are males (78%, 88.8%, and 77.9%, respectively). Although the overall population is made up of less than two-thirds males (64.2%). Disproportionate male gender distributions have also been observed in the previous studies where samples of drug using pharmacists were involved. For example, the sample of recovering pharmacists in the Bissell study (Bissell et al., 1989) was comprised of 83% males and only 17% females. Similarly, the Gallegos study (Gallegos et al., 1988) found that 89% of the pharmacists who entered drug treatment from 1975 to 1987 were males.



Table 18. Demographic Characteristics (as %) of the Drug Using Pharmacists from the Three Data Sources Interview and the Population of Practicing U.S. Pharmacists

Variable	Interview B (N = 50)	Archive B (N = 89)	Survey B (N = 312)	All U.S. Pharmacists* (N = 179,445)
Gender				
Male	78.0	88.8	77.9	64.2
Female	22.0	11.2	22.1	29.2
Unknown	--	--	--	6.2
Race				
White	96.0	87.5	94.3	81.9
African American	2.0	6.3	1.6	2.4
Hispanic	2.0	4.2	1.6	1.4
Asian	--	2.0	2.5	3.3
American Indian	--	--	--	.5
Unknown	--	**	--	10.7
Age				
0-29	8.0	21.4	15.7	6.3
30-39	38.0	32.9	20.5	28.6
40-49	36.0	25.7	22.5	25.2
50-59	12.0	12.9	23.0	15.2
60+	6.0	7.1	18.3	16.2
Unknown	--	--	--	8.3
Degree Status				
Bachelor's	84.0	--	82.4	84.1
PharmD	4.0	--	11.5	6.2
Master's	12.0	--	5.8	4.7
Other	--	--	.3	1.4
Unknown	--	100.0	--	3.5
Practice Setting***				
Hospital	28.0	--	22.4	23.6
Chain Retail	26.0	100.0	59.6	33.1
Independent Retail	16.0	--	****	32.6
Home Infusion	6.0	--	3.5	--
Nursing Home	4.0	--	--	2.2
Temporary	2.0	--	--	--
Contract	--	--	--	--
Other	--	--	14.5	8.4

\* These data were obtained from the Pharmacy Manpower Project

\*\* Race data was unavailable for 41 (46.1%) of the cases in the archival component. However, for comparison purposes, the above percentages do not include these cases.

\*\*\* The practice setting percentages for the interview participants represents their principal practice setting during their drug use years.

\*\*\*\* The survey instrument did not differentiate between chain and independent retail settings; they are presented together

These gender differences become more apparent in light of the available estimates on chemical dependency among all U.S. citizens. Levers and Hawes (1990) estimate that the population of chemically dependent people in this country is comprised of 40% females. Thus, all indications suggest that male pharmacists become drug abusers more often than their female colleagues. The question is why? The answer is most likely related to the masculine ideals that pervade all health care professions. "Macho" terms such as "God complex" and "the invincible doctor" have long been associated with the health care professions. Similarly, customary male characteristics such as competition and strong-willed determinism are standard criteria that define a successful health care practitioner. These conditions lead to an androcentric culture in which superiority and male ego are present and always predominant.

Drug use, especially forms of a "treat-it-yourself" self-medication, fit right into this male dominant mind set. Given that these ideals are similar to the social reinforcements that most men are exposed to throughout life, male pharmacists are more susceptible to drug use. Conversely, the "treat-it-yourself" application does not come as easily or as "naturally" for female pharmacists.

Moreover, it is likely that men are particularly vulnerable to the paradox of familiarity that was discussed in Chapter Five. The "king of my castle," "master of my domain" aspects of the paradox of familiarity compliment the "typical" male mind set. Men, more so than women, are socialized to present a strong, self-assured image that suggests that they are always in control. Men do not easily admit inadequacies and tend to find seeking help to be a difficult and dependent approach to the world. This is especially true when it comes to an area or subject matter where they possess considerable

knowledge. For example, it would be unheard of for a male carpenter to seek help in building his own house or for a male auto mechanic to let anyone else work on his car. This "treat-it-yourself" approach to the world undoubtedly helps facilitate benign views of drugs and supports self-medication practices.

As Table 18 also shows, the vast majority of the drug using pharmacists in the personal interview, archival loss prevention apprehension report, and survey samples were Caucasians (96%, 87.5%, and 94.3% respectively). Past studies (Gallegos et al., 1988, McAuliffe et al., 1987) have also found Caucasians to make up the vast majority of reported drug use cases. Referring to the far right column of Table 18, however, notice that the findings of the Pharmacy Manpower Project estimate that only 81.9% of the overall population of practicing U.S. pharmacists are Caucasian. Thus, it appears that the percentages of Caucasians in samples of drug using pharmacists are consistently higher than they are in the larger professional population.

Moreover, note that the race distributions in Table 18 are significantly different from those seen in the overall population of drug using Americans. For example, recent National Institute of Justice research (NIJ, 1997) indicates that minorities, not Caucasians, tend to make up disproportionate proportions of apprehended drug users. Slightly higher Caucasian drug use figures in all three samples of pharmacists suggests that being and becoming a pharmacist may somehow go against the traditional race/drug use trends.

The data on age (Table 18) show that drug using pharmacists tend to be older than the population of U.S. pharmacists. A high incidence of drug use among older pharmacists is most likely a "sign of the times." Most middle-aged pharmacists went to school during the 1960s and 1970s, a time when permissive attitudes toward recreational drug use were

popular. Moreover, pharmacists who went to school prior to 1970 were exposed to the relaxed dispensing practices that were commonplace in the pharmacy profession before self-regulation and more strict federal guidelines (Controlled Substance Act of 1970) ushered in a more conservative approach to prescription medicines. Pharmacists who were educated and professionally socialized during these time periods may be more likely to hold more permissive attitudes toward drugs and drug use and hence engage in either the recreational or therapeutic use of prescription drugs.

There are several other factors that contribute to the age distributions seen in Table 18. The personal interview and loss prevention apprehension report data suggest that it often takes many years for increasing drug use to interfere with the personal and professional life of the affected pharmacist. Thus, it usually takes time for the drug use to progress to the point where others become aware and actions begin to be taken against them.

Also, it takes time for employers to become aware of the drug shortages that result from the pharmacists drug use. Early on, many pharmacists are careful about stealing drugs. However, over time, they tend to become more sloppy and increase the likelihood of having their behaviors discovered. Moreover, it takes time for the drug shortages to pile up as the individual develops a tolerance and continues using over several years.

#### Pharmacists' Drug Use Trends and Patterns

In many ways, the findings of this study serve to support and reinforce what we already know about the nature and extent of pharmacist's drug use. For example, the survey inquiry found that 58.7% of the sample admitted to at least one episode of illicit

prescription drug use.<sup>2</sup> This lifetime, overall usage figure very closely matches the 62% that was reported by McAuliffe et al (1987)

The nationwide survey data suggests that considerable numbers of pharmacists engage in repeated illicit prescription drug use—19.8% of the sample reported 5-10 use episodes and another 12.7% report more than 10 episodes. These figures are somewhat lower than what McAuliffe et al (1987) found ten years ago among New York pharmacists, namely, 32% of that sample reported more than 10 lifetime drug use episodes. However, note that there is no way to determine how much of that 32% constituted marijuana and other street drugs

The findings from this study's survey component add to the evidence that there are significant numbers of pharmacists who are experiencing problems with their drug use. A full 5.6% of the survey sample admitted that they had abused some form of prescription or nonprescription drug. Focusing on a more restricted, clinical definition, McAuliffe et al (1987) found that 2.3% of their sample self-reported a drug dependent condition. The Normack et al (1985a) study focused on drug impairment, a more work-delimited definition of problematic drug use.<sup>3</sup> They estimate that 21% of the practicing pharmacists in North Carolina are at risk having their drug use interfere with their professional capabilities. While each of these inquiries utilized a slightly different definition of problematic drug use, all three studies demonstrate that a sizable portion of the practicing pharmacy community is regularly engaging in routine drug use which has a negative impact on some aspect of their life

The survey component of this study also found that pain medications are the preferred substance of drug using pharmacists. Specifically, 28.1% had used nonnarcotic

analgesics and 7.1% had used narcotic, Schedule II, analgesics. Pain medications showed the highest prevalence numbers in the McAuliffe et al. (1987) study as well. This high incidence and prevalence of pain medications use is particularly problematic. These analgesic medicines are among the most addictive substances. Moreover, the body quickly develops a tolerance to these medications, resulting in a progressively higher dosage level to maintain one's drug habit. Finally, pain medications are known to impair motor skills and decision making, an alarming prospect for the pharmacist who uses them before or during work.

The drug use data from the interview and archival components of the present study were gathered from pharmacists with preexisting, extensive drug use histories. The findings confirm that many pharmacists progress into daily, habitual drug use. In most cases, the individuals fit the description of poly-drug users as they actively exploit their unrestricted access and knowledge via complex, multiple drug use regimens. I use two terms to describe the details of this poly-drug use: "garbage head" and "titrating." Garbage head is a term that recovering pharmacists use to describe their indiscriminant use of any available mind altering substances. If they think a drug will get them high, a garbage head will try it. On the other hand, the term titrating refers to an applied approach to pharmacy wherein the knowledgeable practitioner combines multiple types of drugs to maintain an optimal physical and mental state. Much of this titrating behavior involves the use of drugs to counteract the negative effects of other drugs. In effect, they aim to "walk a chemical tightrope" by ingesting dozens of different drugs over the course of a given day. Again, pain relieving medications seem to be at the center of most pharmacist's garbage heading and titrating behaviors.

Drug using pharmacists develop remarkable physical tolerances for massive dosage schedules. In most cases, drug using pharmacists avoid entering into drug rehabilitation. Their drug use trajectory is often said to have a very "low bottom" where suicide attempts, a fractured family life, and serious health problems are not uncommon. In most cases, they do not seek professional help until they are caught by their employers or have their license revoked or suspended by some official entity within the profession.

Although previous researchers have not gone into the same level of detail as the present study, the general drug use themes from the interview and archival components of this inquiry closely approximate the findings of earlier studies that have focused on samples of pharmacists who are recovering from drug abuse (Bissell et al., 1989; Gallegos et al., 1988; Sheffield et al., 1992).

While many of the notable findings from this study serve to confirm what is already known about pharmacists' drug use, there are a number of areas in which the present research breaks new ground. For example, I have introduced the terms "bad-intentioned misusers" and "good-intentioned self-medicators" to distinguish between two distinct patterns of drug use among pharmacists.

Bad-intentioned misusers. These pharmacists use drugs for recreational purposes. They are principally concerned with the euphoric effects of prescription drugs and engage in massive levels of use. These individuals begin their drug use prior to entering a pharmacy career, usually using street drugs during high school. Many of the misusers claimed that they entered pharmacy school for the expressed purpose of gaining access to stronger prescription drugs that were difficult to obtain through the illicit street market.

Bad-intentioned misusers take advantage of the access and knowledge that they are offered in pharmacy school. They tend to quickly experiment with the prescription drugs that they read about in class. These pharmacists usually exploit the tolerant social attitudes toward drug use that exist in college and seek out other drug using pharmacy students. Pharmacy fraternities often turn out to be the perfect venue for exploring other drugs and progressing into deeper addiction. Bad-intentioned misusers describe how they are able to trade drugs with fraternity brothers and other students, thus maximizing the experimental base of their drug use.

Pharmacy practice offers bad-intentioned misusers even more opportunity to engage in illicit prescription drug use. They routinely use their knowledge of the weakness of drug inventory and audit systems to increase and fine tune their drug use. This category of individuals develop staggering drug use habits and are among the best at titrating their drug induced state to remain functional and hide their deviance.

Good-intentioned self-medicators. These pharmacists initially begin using prescription drugs for their therapeutic effects. Faced with a chronic physical condition, work-related aches/stress, or some other physical ailment, they decide to circumvent the requirement of a doctor's prescription and self-medicate their own problems. Over time, this type of good-intentioned self-treatment leads to a slippery slope where occasional recommended doses progress into increased and expanded drug habits. Ironically, these pharmacists see a need to self-medicate these troublesome health conditions so that they can better fulfill their professional responsibilities.

At every turn, greater pharmaceutical expertise turns out to be the self-medicator's greatest enemy. When they begin using, they justify their drug use on the basis that they



are most intimately familiar with their own physical condition and can best apply their extensive knowledge of prescription drugs. As they build a drug tolerance and/or expand their usage into different substances, they reason that their personal knowledge of the drug's effects will protect them from becoming dependent. Once they recognize that they have a drug problem, they often use this same drug expertise to convince themselves that they can also detox without any external assistance. Other times, they decide that they will be able to gradually medicate themselves out of the predicament by "mixing and matching" drugs or switching drug types.

Unlike the bad-intentioned misuser, the self-medicators tend to engage in limited amounts of drug use prior to graduating from pharmacy school. Upon entering pharmacy practice, their initial drug use is almost always experimental in nature and limited to street drugs. Their initial use of prescription drugs is described as harmless and often comes at the advice of fellow pharmacists. In almost every case, the self-medicators describe how co-workers or mentors were aware of their behavior or may have actively encouraged their early exploratory use.

This study identifies a number of social factors that contribute to pharmacists' illicit prescription drug use behaviors. Namely, I have identified an assortment of educational, occupational, and professional factors that are related to the incidence and prevalence of drug use. This leads me to conclude that there are certain aspects associated with being and becoming a pharmacist which potentially contribute to drug use.

Educational socialization influences There are a number of aspects of the pharmacy education process that contribute to drug use within the profession. For example, my analysis reveals that pharmacists typically receive a one-sided education

about prescription medications. All of their course work, interactions with industry representatives, and internship experiences stress the powerful healing potentials of drugs, not the dangers of addiction.

In fact, the interview component revealed that the vast majority of pharmacists received no formal training on the psychological aspects of substance abuse. Moreover, an OLS regression using the survey data found a lack of substance abuse course work to be predictive of drug use in a random sample of practicing pharmacists.

The interview data also suggest that the permissive drug use attitudes that exist in the college environment further complicate matters for pharmacy students. Pharmacy fraternities and other student party venues play host to recreational drug use. This recreational drug use usually includes a wide variety of prescription drugs that are stolen from internship sites.

The above discussion has outlined the components of what I have termed an "educational paradox." Pharmacy students spend four to six years in an environment that places them at greater risk of drug use and abuse. They are offered a wealth of information on the pharmacological aspects of prescription medicines. Interactions in class with instructors, with representatives of the pharmaceutical industry, and at internship sites reinforce almost exclusively the positive aspects of medicine on the body. A new-found unlimited access to prescription drugs offers them opportunities to steal and use the drugs that they have read and heard about. These factors are exacerbated by a lack of substance abuse education and socially acceptable attitudes toward drug use among student peers. The interview participants describe how this unique combination of experiences help shape a benign belief system toward prescription medicines. They claim that they did not fear

addictive substances. Instead, they were intrigued by them and felt assured that their newly attained knowledge would protect and insulate them from any negative side effects that might arise out of experimental use.

Occupational socialization influences. These data also show that drug use is also reinforced via the occupational socialization process. The majority of interviewees described how early mentoring relationships actually served to further facilitate their drug use. Pharmacy mentors often approved of, or even encouraged, self-medicating behaviors among neophyte employees.

In many cases, the interviewees explained how they witnessed pharmacy mentors or other co-workers openly using prescription drugs at work. The message was quite clear: there is no reason to involve a doctor in your personal health care if you can more simply resolve the problem by taking a pill or two out of pharmacy stock. These experiences often served as important reinforcing examples that were used to justify one's own initial and progressive self-medication behaviors. The multivariate analysis of the survey data also showed that co-worker drug use was highly predictive of personal drug use.

All three data collection efforts suggest that pharmacy employers are doing very little to address the drug use problem. For example, the vast majority of the interviewees claim that their employers offered limited informational or educational resources regarding drug abuse. This finding was replicated in the survey data where only one-thirds of the pharmacists report being exposed to drug abuse training or resources. Surprisingly, however, a lack of drug abuse resources did not have a significant predictive effect on

drug use behaviors in the sample of survey practicing pharmacist respondents (see Table 14).

The interview and archival data demonstrate that pharmacy employers adopt a largely punitive posture toward the drug use problem. For instance, the archival data show that termination, restitution, police involvement, and DEA involvement were the preferred list of sanctions used against drug-involved pharmacists. Conversely, the less punitive alternatives such as treatment referrals and contacting the State Board of Pharmacy were exercised in a considerable minority of the cases (27% and 15%, respectively).

Collectively the data suggest that pharmacy employers are taking a largely reactive approach to drug use among pharmacists. They are offering very little training and resources. Moreover, when they apprehend a drug using pharmacist, they tend to adopt a "zero tolerance" attitude that stresses deterrence and protecting their own financial well being. This self-interested posture does very little to limit or prevent drug use among the rest of their pharmacy work force.

My inquiry into the relationship between occupational role strain and drug use produced inconclusive results. There was no evidence to support Quinney's (1963) assertion that a disjuncture between business and health care oriented work environments leads to deviance. In fact, the analysis of the survey data found a negative relationship between role strain and drug use. I have offered several possible explanations for the lack of expected results in this area. Some of these explanations focus on constraints that may result from weak measures of the role strain variable.

However, measurement error alone does not account for the unexpected role strain findings. The pharmacy profession has undergone drastic changes since the 1960s when

Quinney conducted his original research. These changes have affected the way pharmacists conceive of and execute their daily activities. Today, pharmacists must accept the fact that health care will be a smaller part of their daily activities. As the retail pharmacy marketplace has grown more competitive, retail pharmacy and hospital corporations have placed been forced to stress quantity over quality. Thus, most retail pharmacists especially are under considerable pressure to fill as many prescriptions in a day as possible. The productivity of a given retail pharmacy location has come to be judged almost exclusively in terms of the number of prescriptions that are filled. This mass merchandising approach has fundamentally transformed the nature of retail pharmacy work. Demands for high prescription volume make it difficult for pharmacists to spend time consulting with their patients. Today, pharmacists routinely use the phrase "count, pour, lick, stick" to characterize the repetitive aspects of their job.

This is not to suggest that role strain, job satisfaction, and job stress no longer factor into the employee deviance equation for pharmacy workers. These factors undoubtedly still play a part in pharmacists' decisions to steal and use drugs. Unfortunately, at this point it is unclear how these various factors manifest themselves and the extent to which they contribute to the overall drug use problem. Future research should consider further these questions.

Professional socialization issues. Much of my discussion has centered on the ways in which the dominant norms of the pharmacy profession shape the drug use attitudes and behaviors of individuals. I used the term "paradox of familiarity" to summarize how the professional socialization process contributed to the drug use behaviors of the 50 interview respondents. My analysis showed how pharmacists gradually developed an

unhealthy sense of invincibility toward the risk of addiction to prescription drugs. Years of educational reinforcement, constant contact with the drugs, and a growing knowledge base decayed some individual's inhibitions. For these pharmacists, familiarity did not breed contempt, instead, it bred "consent and complacency."

The interview data illustrate how this constant familiarity with prescription drugs plays an integral part in every aspect of the pharmacist's progression into greater drug use. Initial use is spurred on by a strong belief in the positive therapeutic potentials of the drugs and a self-assurance that problematic use by a professional is simply not possible. Increased and expanded drug use habits result when the individual continues to rely solely on their own pharmaceutical knowledge. Deep and drawn out consequences of the addiction develop when the individual refuses to reach out to others for help, insisting instead that they can treat themselves.

At this point, I have been unable to conclusively confirm the existence of a paradox of familiarity using the survey data. While the findings from the multivariate analysis show attitudes toward self-medication to be highly predictive of drug use, the results for the "dispensing norm" and "belief in medications" variables were not as promising as expected. Both of these statistically insignificant independent variables suffer from measurement constraints. Moreover, my use of OLS regression techniques does not offer me the type of statistical power needed to explore the relationship intricacies among these multiple professional socialization measures. Hopefully, future analysis will prove to be more fruitful.

Nonetheless, the strong predictive effect of the "self-medication" variable remains encouraging. This variable was, by far, the single most significant independent variable in

the regression model. More importantly, all three of the data sources have demonstrated conclusively that cavalier attitudes toward self-medication contribute to the onset and progression of pharmacists' illicit prescription drug use involvement.

### Theoretical Implications

The data from this study repeatedly illustrate a strong relationship between pharmacists' illicit prescription drug use and various social factors. There is a wealth of theoretical significance attached to this basic observation. For example, it immediately calls into question the dominant theoretical approach commonly used to explain drug use among pharmacists. As long as research has been conducted on this topic, scholars have downplayed the significance that social factors play in the onset of pharmacists' drug use. Armed with a medical model approach to substance abuse, scholars have assumed that a combination of biological (e.g., genetic predisposition) and psychological (e.g., early childhood development) factors leave some adult pharmacists more susceptible to drug abuse and addiction than others. This assumption has prompted them to focus very little attention on the social circumstances that surround the onset of use. However, my research has shown that the socialization process often constructs the motivation associated with initial drug use decisions. For example, a number of the pharmacists that I interviewed were in their late 30's when they began using drugs. They described how they repeatedly turned down opportunities to drink alcohol or use drugs earlier in life. They claim that their long standing objections to drug use were altered only after being exposed to the socially reinforced behaviors and attitudes of fellow pharmacists. In short, it was

only after watching peers' drug use or listening to their advise that the pharmacists' seriously considered using drugs.

My findings suggest that previous research on drug use among pharmacists has suffered from an incomplete conceptual focus. In particular, I am suggesting that scholars have largely overlooked the way that social factors facilitate/contribute to the onset and progression of drug use among pharmacists.

My observations regarding the nature and dynamics of illicit prescription drug use among pharmacists also serve to better inform contemporary drug abuse theory. For decades, the medical model has almost exclusively dominated the way that scholars and practitioners alike approach the problem of drug abuse. While pockets of opposition exist, most experts still see drug abuse as a disease. Predisposition to this disease are said to be caused by one's genetic make up or early childhood development. While social factors are not ignored entirely, they are largely treated as merely catalysts that set off the "time bomb" that some people have been carrying around with them for years.

To date, scholars have been unable to isolate any curable genetic or psychological factors associated with drug abuse. As such, a purely medical model approach to the problem spawns a reactionary approach to the problem. Left with no real prevention alternatives, a wealth of clinical and self-help approaches (A.A) have been developed to treat those individuals who see their predisposing seeds germinate into a drug abuse condition. Still, the best that these treatment options offer is not a cure that the now infected individual might achieve sobriety, thus forcing their disease condition back into a temporary dormancy status.



LeClair Bissell, widely regarded as the foremost authority on drug abuse among health care professionals, recently co-authored a book chapter that summarizes our contemporary understanding and approaches to drug abuse among the various health professions (Hankes & Bissell, 1992). This commentary succinctly captures the outcome of an exclusively medical model approach to drug abuse. After presenting data on the prevalence of drug abuse, the unique aspects of health professionals' drug use conditions, and current range of reactions to impairment, the authors engage in an especially revealing discussion on the prevention topic. In particular, the authors differentiate between what they call "primary" and "secondary" prevention. They state that primary prevention refers to preemptive efforts that stop drug use before it starts. Conversely, secondary prevention takes a "nip it in the bud" approach to drug use that instead focuses time and resources on early identification and treatment alternatives. The authors conclude that "secondary prevention through early identification and therapeutic intervention appears to be more viable than primary prevention, which remains elusive" (Hankes & Bissell, 1992, 901). I submit that the failure of primary prevention efforts can be linked to the exclusively medical model focus of contemporary research. We will never foster successful prevention efforts unless we begin to accept that social factors also have a significant impact on drug use behaviors. Note, however, that accepting this proposition will force the pharmacy profession to turn the spotlight onto itself and take a hard look at the ways in which the educational, occupational, and professional aspects of the pharmacy experience contribute to the drug induced demise of the individual's careers within. This denial of personal and professional responsibility are hallmarks of the medical model approach to substance abuse. In a previous discussion (Dabney & Heffington, 1996), I have argued that this

deferred responsibility is precisely what makes the medical model so attractive to the pharmacy profession.

Nothing in this discussion is meant to challenge the validity of the medical model. On the contrary, there are many valuable aspects of this longstanding theoretical approach to substance abuse. However, my discussion does attempt to reorient and broaden the conceptual focus of drug abuse theory and research so that the emphasis is more squarely focused on the factors associated with the onset and progression of drug use behaviors. This type of conceptual emphasis forces theorists, researchers, and practitioners alike to remain focused on those issues that they have some control over. There is little that can be done to change the genetic composition of mature drug users. Similarly, we cannot undo the problematic psychological influence of early childhood development. We can, however, take steps to identify and alter important social conditions that adults encounter in their occupational and professional lives.

In the case of pharmacists, I have been able to demonstrate that numerous aspects of the educational, occupational, and professional experiences consistently facilitate drug use. The identification and isolation of these social factors then allows for efforts to be directed on altering these social situations in a way that will divert or-prevent the onset and subsequent progression of the problem. This proactive approach offers a much more optimistic outlook for the likelihood that we might eventually curb the future incidence of drug abuse.

This dissertation has been principally concerned with critiquing and expanding existing drug use theory. However, the findings from this study could easily be used to expand our understanding and empirical support for the conceptual frameworks of several

existing theories of deviance. For example, the data offer considerable support for social learning theory (Akers, 1985) and techniques of neutralization (Sykes & Matza, 1957). The data show the existence of a clear learning process wherein issues normative definitions, imitation, differential reinforcement, and differential association can be measured and extrapolated

### Policy Implications

The findings from this study generate several suggestions for policy makers within the pharmacy profession. Following the plan of the rest of this dissertation, these policy implications are also grouped into the following three categories: educational, occupational, and professional.

#### Implications for Pharmacy Educators

There are several things that can be done at the educational level. First, curricular changes should be implemented that build ample substance abuse course work into the formal education process of every pharmacy student. Course offerings should only be one facet of this effort. In order to counteract the wealth of positive reinforcement toward prescription drugs, educators should make an extra effort to bring recovering pharmacists into the classroom to tell their real life stories. State Recovery Networks almost always have willing volunteers ready and willing to perform such tasks. This type of experience puts a real face on the realities of pharmacists' drug use. It forces pharmacists to come to grips with the fact that successful pharmacists can become addicted to prescription medicines. More importantly, it offers students first hand accounts of the paradoxical relationship that can develop between pharmaceutical knowledge and self-medication.

Pharmacy educators should also take a more proactive approach to the recreational drug use that exists in pharmacy schools. While it is unreasonable to suggest that college drug use could somehow be eliminated, there is a very real need to address prescription drug use in pharmacy school. Informational and educational resources could be implemented that would encourage witnesses of drug use to come forward. For example, anonymous telephone hot lines could increase the reporting of problems. Pharmacy fraternities could be more strictly monitored and encouraged to monitor themselves. Drug inventories at internship sites could be better regulated. They might even consider pursuing some form of random drug testing of student interns.

Most importantly, pharmacy schools should make a concerted effort to address the fact that most pharmacy graduates emerge from the college experience with a unquestioning benign faith in prescription medicines. This "blind faith," when coupled with a lack of substance abuse education, leaves pharmacy graduates with a one-sided, positively biased view of prescription drugs. There is no need for pharmacists to believe so strongly in the harmlessness of the medicines that they dispense. Pharmacists, more so than any other member of society, should have a healthy skepticism about the unlimited use of prescription drugs.

#### Implications For Pharmacy Employers

The findings of the personal interview component of this study offer strong evidence that some pharmacy mentors actually contribute to drug use in neophyte pharmacists. Much of this ill-fated advice can be traced to the fact that the pharmacy mentors were trained during a time when self-medication was acceptable professional behavior. As such, pharmacy employers may be directly contributing to their own problem

by uniformly assigning their most senior pharmacists to mentoring duties. Pharmacy employers need to be more careful about mentoring assignments by looking beyond seniority issues to other character issues. Younger pharmacists are most likely to have had substance abuse education and can begin to break the generational deviance learning cycles that appear to exist in the profession.

Pharmacy employers also should increase the amount of drug abuse-specific educational and informational resources that they make available to their employees. At present, it is quite clear that pharmacy employers are taking little responsibility in raising awareness about pharmacists' drug use and offering affected individuals a viable way out of their problems.

Similarly, pharmacy employers should reevaluate the way in which they react to apprehended drug using pharmacists. They need to recognize that other pharmacists are their teammates, not adversaries in the fight against drug use among the ranks.

#### Implications for the Profession

The larger pharmacy profession can also take steps to help address the drug use problem. In particular, better relationships need to be fostered between State Boards of Pharmacy and their respective Pharmacists' Recovery Network. Coordinated efforts between these two administrative entities can go a long way toward changing the professional climate within each state. Increased awareness and understanding should begin to break down the walls of silence that keep co-workers and loved ones from coming forward with information about drug using pharmacists. Also, raised awareness will also benefit the affected individual who is all too willing to hide behind their well developed denial.

In closing, all entities of the pharmacy profession can gain a lot by changing their present orientations toward drug use among pharmacists. My findings offer strong evidence linking a host of social factors to pharmacists drug using behaviors. Researchers and practitioners alike need to follow up on these findings. They need to begin to look more closely at the ways in which their personal actions and the actions of the various bureaucratic structures that they are contributing to this problem. This profession has spent entirely too much time convincing itself that there are no responsible parties behind the drug use problems that exist within its ranks. The time has come for a more sociological focus that takes a hard look at the phenomenon and is willing to identify problem areas and construct efficient prevention efforts to address these issues.

#### Future Research Directions

The insight from the present study generates several new research directions. For example, there is a need for more research which considers the issue of illicit prescription drug use among samples of practicing pharmacists. These individuals are not biased by the apprehension or recovery process and offer the most useful insight into the nature and dynamics of pharmacists' drug use behaviors.

Given that the recovery process often shapes the individual's constructions of their past drug use behaviors, it would be useful to gather narrative accounts from a sample of pharmacists who have recently entered into treatment. A comparison of the more "seasoned" recovering pharmacists, one could better determine the role that the recovery process has on the way that individual's theorize about their drug abuse careers.

Future research efforts should also consider the potential differences that exist between pharmacists use of prescription medicines and other controlled substances (i.e., street drugs and alcohol). Inquiry should more thoroughly consider the relationship between professional roles/professional identity and the use of controlled substances.

Finally, additional research needs to be done in the area of job role strain. While the present study was unable to isolate any consistent pattern between role strain and deviance, I was using a dated notion of the role strain concept (Quinney, 1963). The nature of pharmacy work has changed a great deal in the past 35 years and there is a need for updated research in this area.

#### Notes

1. Only drug use episodes involving the following 10 addictive substances are included: cocaine, amphetamines, other stimulants, barbiturates, benzodiazepines, narcotic analgesics, nonnarcotic analgesics, inhalants, muscle relaxants, and antidepressants. The data on marijuana/hashish use and antibiotic use were excluded from this discussion. The presence of five or more use episodes is indicative of a relaxed approach to unauthorized drug use, thus suggesting that the individual has progressed past the experimental or one-time occasion of drug use.

2. These statistics do not include pharmacists' use of marijuana/hashish or antibiotics. Only the following 10 addictive, prescription substances are included: cocaine, amphetamines, other stimulants, barbiturates, benzodiazepines, narcotic analgesics, nonnarcotic analgesics, inhalants, muscle relaxants, and antidepressants.

3. The researchers define impairment as drug use which "interferes with performance of everyday activities including the ability to sustain professional growth and contribute to patient care through interpersonal skills" (Normack et al., 1985a, 46).

## APPENDIX A

### RECOVERING PHARMACIST INTERVIEW GUIDE

#### Topic #1: Pharmacy background

- Present occupational status (where, doing what, how long . . . )
- Develop a career portrait (where, how long, why)
- Why pharmacy? (job expectations)

#### Topic #2: Pharmacy education

- Formal training? (where, when, how was it)
- Describe pharmacy education
- Describe socialization process (in-school & out)

#### Topic #3: Early pharmacy work (focus on professional socialization)

- Probe into the environment and conditions of early work
- Describe early "lessons"
- Who & how were "lessons" offered?
- Describe the work group & dynamics of the job setting
- Apprenticeships or internship during school?
- Was the transition from school to work hard?

#### Topic #4: Continued pharmacy work (more socialization)

- When, if ever, do you move "into your own" on the job?
- How do things change over the course of the career?
- Describe on-the-job maturation process (student to teacher)
- Probe into changes that occur over the course of a career
- What "type" of pharmacist do you see yourself as?
- How do the environments compare?
- How do the attitudes toward the job and the drugs compare?

#### Topic #5: Job satisfaction (with intro)

- Describe what job satisfaction means to you?
- Do you meet this requirement? (did user meet requirements?)
- Could satisfaction be reached and maintained?
- How do/did expectations evolve? (from school to present)

#### Topic #6: Attitude toward substances (over course of career)

- Impact of school? (social object concept)
- Impact of early work?
- Impact of career course?
- Present attitudes?



Topic #7: Describing the problem(s)

- Use of a pencil and paper exercise (respondent draws a retrospective time line representing the course of their substance abuse history)
- Approach the issue as a process
- Describe the end first (historical reflection)
- Get details of types of substances, sources & extent (focus on work--access, techniques, patterns)
- Effects on working conditions? (on-the-job "impairment" issue)
- Cover-up techniques?--Make sure to get details on how bad, how long, how caught
- Responsibility issues?
- Did anyone know? (why or why not)
- Describe the enabling and rationalization process

Topic #8: From behavior to rationalizations to sources

- Probe into state of mind (transformation) throughout
- Sources of the rationalizations? (internal/external?)
- Describe the learning process (self-taught or other)
- Describe the role of environmental factors

Topic #9: Causes of the problem (Using the diagram--point specific)

- Guide me back to the beginning focusing on "triggers"
- Describe how you do and did see problem
- What do you see as the root of the problem?
- Link back to earlier school discussion (how it did or didn't prepare them) (substance abuse education)
- How did work factor in? (first as a cause then as an enabler)
- Link back to the job satisfaction talk above?
- How did private life factor in?
- How did you (they) identify the source?
- Any other notable sources?

Topic #10: Details of after care

- Who, what type, where, when, how, why, how many?
- What were the effects did/do treatment have on the problem?
- How did employer react? (probe into personal impact)
- How did co-workers react? (probe into personal impact)
- How did family react? (probe into personal impact)
- Am I forgetting anyone? (why?)

Topic #11: Life after aftercare

- Describe the situation
- Image of self?
- Image of peers?
- Image of co-workers? (do they know, do they react?)

Topic #12: Personal appraisal/reflection on impairment issue

- Where do the problems lay?
- How do we address the potential problems?
- Can the problem be addressed better in school?
- Can the problem be addressed better on the job?
- Can the profession better address the problem?

Topic #13: Demographic wrap-up (see questionnaire on next page)

### Interview Background Information

What is your present Age: \_\_\_\_\_

What is your Gender (check one)

- (1) Male \_\_\_\_\_
- (2) Female \_\_\_\_\_

What is your Race or Ethnic Background (check one)

- (1) Caucasian \_\_\_\_\_
- (2) Black \_\_\_\_\_
- (3) Hispanic \_\_\_\_\_
- (4) Asian \_\_\_\_\_
- (5) Native American \_\_\_\_\_
- (6) Other \_\_\_\_\_ (specify) \_\_\_\_\_

What is your present Marital Status? (check one)

- (1) Single \_\_\_\_\_
- (2) Married \_\_\_\_\_
- (3) Divorced \_\_\_\_\_
- (4) Widowed \_\_\_\_\_

What is your Educational Background? (check all that apply)

- Bachelors Degree \_\_\_\_\_
- PharmD \_\_\_\_\_
- Masters Degree \_\_\_\_\_
- Other \_\_\_\_\_ (specify) \_\_\_\_\_

What is your Present Level Of Income? (check one)

- (1) Less than \$20,000 \_\_\_\_\_
- (2) \$20,000 - \$29,999 \_\_\_\_\_
- (3) \$30,000 - \$39,999 \_\_\_\_\_
- (4) \$40,000 - \$49,999 \_\_\_\_\_
- (5) \$50,000 - \$59,999 \_\_\_\_\_
- (6) \$60,000 - \$69,999 \_\_\_\_\_
- (7) \$70,000 plus \_\_\_\_\_

What was your Level Of Income Prior To Treatment? (check one)

- (1) Less than \$20,000 \_\_\_\_\_
- (2) \$20,000 - \$29,999 \_\_\_\_\_

- (3) \$30,000 - \$39,999 \_\_\_\_\_
- (4) \$40,000 - \$49,999 \_\_\_\_\_
- (5) \$50,000 - \$59,999 \_\_\_\_\_
- (6) \$60,000 - \$69,999 \_\_\_\_\_
- (7) \$70,000 plus \_\_\_\_\_

What is your present Religious Affiliation? (check one)

- (1) Roman Catholic \_\_\_\_\_
- (2) Protestant \_\_\_\_\_
- (3) Jewish \_\_\_\_\_
- (4) Nondenominational \_\_\_\_\_
- (5) Other \_\_\_\_\_ (specify) \_\_\_\_\_

Do You consider yourself to be Religiously Active? (check one)

- (1) Yes \_\_\_\_\_
- (2) No \_\_\_\_\_

APPENDIX B  
CORPORATE LOSS PREVENTION INCIDENT REPORT DATA TEMPLATE

ID#: \_\_\_\_\_

Incident Information

Date of Report: \_\_\_\_\_

Location Information \_\_\_\_\_

Mode of detection: \_\_\_\_\_

Incident description \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Length of Investigation \_\_\_\_\_

Outcome of investigation \_\_\_\_\_

Interview details: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Law Enforcement Involvements? \_\_\_\_\_

Board Involvements? \_\_\_\_\_

Recovery Network Involvements? \_\_\_\_\_

Other External Involvements: \_\_\_\_\_

Response of the Accused: \_\_\_\_\_

Resulting Actions: \_\_\_\_\_

Restitution arrangements: \_\_\_\_\_

Present status of case: \_\_\_\_\_

Pending Actions? \_\_\_\_\_

Substance Information

Substances Involved: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Intent: Personal use \_\_\_\_\_ Sale \_\_\_\_\_

Other \_\_\_\_\_

Diversion Techniques \_\_\_\_\_

Total Dollar Loss. \$ \_\_\_\_\_ Acting alone? yes \_\_\_\_\_ no \_\_\_\_\_

Others aware? \_\_\_\_\_

Substance Use Details \_\_\_\_\_

\_\_\_\_\_

Resulting treatment: \_\_\_\_\_

Present status: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

### Perpetrator Demographics

Age: \_\_\_\_\_ Gender: \_\_\_\_\_ Race: \_\_\_\_\_

Length of Tenure: \_\_\_\_\_ Job description: \_\_\_\_\_

Performance evaluation? \_\_\_\_\_ Previous record: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

APPENDIX C  
PRACTICING PHARMACIST SURVEY INSTRUMENT



# University of Florida Pharmacists Survey

## Instructions:

For each of the following questions, check the most appropriate response or provide the requested information.

## DESCRIBE YOURSELF

1. Current age: \_\_\_\_\_ years old

2. Gender:

- (1) ☐ Male  
(2) ☐ Female

3. Race or Ethnic background:

- (1) ☐ Caucasian  
(2) ☐ Black  
(3) ☐ Hispanic  
(4) ☐ Asian  
(5) ☐ Other (specify) \_\_\_\_\_

4. Present marital status:

- (1) ☐ Not married  
(2) ☐ Married  
(3) ☐ Separated  
(4) ☐ Divorced  
(5) ☐ Widowed

5. Religious affiliation:

- (1) ☐ Catholic  
(2) ☐ Protestant (specify) \_\_\_\_\_  
(3) ☐ Jewish  
(4) ☐ Non-Denominational  
(5) ☐ Other (specify) \_\_\_\_\_

6. Are you religiously active?

- (1) ☐ No  
(2) ☐ Yes

7. Are you spiritually active?

- (1) ☐ No  
(2) ☐ Yes

## CURRENT EMPLOYMENT ISSUES

8. Current employment status: (check all that apply)

- ☐ Practicing in a hospital  
☐ Practicing in retail  
☐ Practicing in home infusion  
☐ Practicing in other setting (specify) \_\_\_\_\_  
☐ Not practicing pharmacy but employed elsewhere  
☐ Not practicing pharmacy and unemployed

9. Current salary:

- (1) ☐ Less than \$40,000  
(2) ☐ \$40,000 to \$49,999  
(3) ☐ \$50,000 to \$59,999  
(4) ☐ \$60,000 to \$69,999  
(5) ☐ \$70,000 to \$79,999  
(6) ☐ \$80,000 to \$89,999  
(7) ☐ \$90,000 plus

10. Which of the following best describes the supervisory responsibilities of your present pharmacy position?

- (1) ☐ Minimal or no supervisory responsibilities (staff Rx)  
(2) ☐ Supervision of support staff only  
(3) ☐ Supervision of licensed pharmacists only  
(4) ☐ Supervision of support staff and pharmacists

11. How long have you been licensed as a pharmacist?

\_\_\_\_\_ years

12. What percent of your pharmacy career has been spent in each of the following branches of pharmacy practice:

Hospital \_\_\_\_\_ %

Chain retail \_\_\_\_\_ %

Independent retail \_\_\_\_\_ %

Home infusion \_\_\_\_\_ %

Other \_\_\_\_\_ %

(specify) \_\_\_\_\_

13. What was your primary reason for entering pharmacy school?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





# University of Florida Pharmacists Survey

## PHARMACY TRAINING

14. Which of the following degrees have you earned?  
(check all that apply)

- ☐ Bachelor in pharmacy-specific discipline  
☐ PharmD  
☐ Masters in pharmacy-specific discipline  
☐ Doctorate in pharmacy-specific discipline  
☐ Other degrees (specify) \_\_\_\_\_

15. What type of training on the psychological aspects of chemical dependency did you receive in pharmacy school?

- (1) ☐ None  
 (2) ☐ Part of a class lecture  
 (3) ☐ A full class lecture  
 (4) ☐ Multiple class lectures  
 (5) ☐ Out-of-class workshop/seminar  
 (6) ☐ Guest lecture(s)  
 (7) ☐ An entire college course  
 (8) ☐ Other (specify) \_\_\_\_\_

16. Have any of your continuing education activities ever included information on the psychological aspects of chemical dependency?

- ☐ No  
☐ Yes (how many hours?) \_\_\_\_\_

17. What types of educational or informational resources related to the problem of drug abuse among pharmacists have been made available to you by your current pharmacy employer? (check all that apply)

- ☐ None  
☐ Pamphlets/Posters  
☐ Anonymous hotline  
☐ Corporate awareness training sessions  
☐ Continuing education opportunities  
☐ Invited guest lectures/seminars  
☐ Regional or national conferences  
☐ Other (specify) \_\_\_\_\_

18. From what school did you receive your bachelors degree in pharmacy?  
 \_\_\_\_\_

19. In what year did you receive your bachelors degree in pharmacy?  
 19 \_\_\_\_\_

20. What was your ranking among your fellow graduates when you completed your bachelors degree in pharmacy?

- (1) ☐ Top 1/3 of your class  
 (2) ☐ Middle 1/3 of your class  
 (3) ☐ Bottom 1/3 of your class

21. How old were you when you received your bachelors degree in pharmacy?  
 \_\_\_\_\_ years old

22. What were your family responsibilities while you were attending school for your bachelors degree in pharmacy?

- (1) ☐ Single non-parent  
 (2) ☐ Single parent  
 (3) ☐ Married non-parent  
 (4) ☐ Married parent

23. Were you a member of a pharmacy-specific fraternity/sorority?

- ☐ No  
☐ Yes

24. During pharmacy school, what percent of your residency was spent living in each of the following settings?

On-campus / Dormitory \_\_\_\_\_ %

Fraternity / Sorority house \_\_\_\_\_ %

Off-campus housing \_\_\_\_\_ %



# University of Florida Pharmacists Survey

## ATTITUDES ON PHARMACY ISSUES

25. For each of the following points in time, indicate how confident you are/were that prescription medicines will produce positive therapeutic results for most physical conditions.

At present:

1—2—3—4—5—6—7—8—9  
not at all somewhat totally  
confident confident confident

During your earliest pharmacy work experiences:

1—2—3—4—5—6—7—8—9  
not at all somewhat totally  
confident confident confident

During pharmacy school:

1—2—3—4—5—6—7—8—9  
not at all somewhat totally  
confident confident confident

26. Pharmacists must often negotiate roles as both healthcare provider and businessperson. What best represents the climate of your current work environment?

1—2—3—4—5—6—7—8—9  
emphasis on equal emphasis on  
business business health care

27. Which type of job environment do you most prefer as a pharmacist?

1—2—3—4—5—6—7—8—9  
emphasis on equal emphasis on  
business business health care

28. Do you agree or disagree: It is acceptable for a licensed pharmacist to occasionally dispense a prescription dosage unit to a loyal customer or family member to "tide" them over until they can obtain a doctor's prescription?

1—2—3—4—5—6—7—8—9  
strongly neutral strongly  
disagree agree

29. Have you ever worked with a pharmacist who dispensed small numbers of prescription dosage units to loyal customers or family members to "tide" them over until they can obtain a doctor's prescription?

☐ No  
☐ Yes

30. Do you agree or disagree: It is sometimes acceptable for prescription medicines to be used for recreational purposes?

1—2—3—4—5—6—7—8—9  
strongly neutral strongly  
disagree agree

31. Do you agree or disagree: It is sometimes acceptable for a licensed pharmacist to self-medicate for a physical ailment without first obtaining a prescription?

1—2—3—4—5—6—7—8—9  
strongly neutral strongly  
disagree agree

32. Have you ever worked with a pharmacist who condoned or accepted the practice of self-medication?

☐ No  
☐ Yes, a supervisor  
☐ Yes, a co-worker

33. How well prepared are you to deal with a drug abusing pharmacist in your current work setting?

1—2—3—4—5—6—7—8—9  
not at all somewhat very  
prepared prepared prepared

University of Florida  
Pharmacists Survey

## DRUG USE ISSUES

34. Have you ever worked with a pharmacist that you thought was removing/dispensing any amount of prescription medication without an authorizing prescription?

☐ No  
☐ Yes

35. Have you ever seen another pharmacist ingest any form of prescription medication without first obtaining a prescription?

☐ No (IF NO, SKIP TO QUESTION #37)  
☐ Yes

35. If you answered YES to the previous item, did you report the incident to anyone?

☐ No  
☐ Yes, but no action was taken  
☐ Yes, and action was taken (specify) \_\_\_\_\_

37. At any point during your life, have you felt that you were abusing some form of prescription or non-prescription drug?

☐ No  
☐ Yes (specify drug type) \_\_\_\_\_

38. Please indicate when, if ever, you first used EACH of the following drugs without first obtaining a prescription.

	Never	Pre-college	During college	Post-college
marjuana/hash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cocaine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
amphetamines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other stimulants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
barbiturates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
benzodiazepines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
narcotic analgesics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
non-narc analgesics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
inhalants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
muscle relaxant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
antidepressants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
antipsychotics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. How many times have you used EACH of the following substances without first obtaining a prescription?

[illegible]

40. For EACH of the following drugs that you have used without a prescription, indicate how you were able to obtain them: (enter as many as apply)

[illegible]

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## BIOGRAPHICAL SKETCH

Dean A. Dabney was born April 23, 1968. His interests in crime and deviance can be attributed to a father who was a police officer and a mother who owned and operated several private security firms. He obtained his bachelor's degree in criminology from Indiana University of Pennsylvania in 1990. He was convinced by his earliest mentor, Bruce L. Berg, to forego law school and continue on in graduate school. He obtained his master's degree in criminology from Indiana University of Pennsylvania in 1993. His master's thesis was on the topic of drug use among nurses.

In the fall of 1992, he began his doctoral studies in the Sociology Department at the University of Florida. He spent all five years at the University of Florida as a research assistant to Richard C. Hollinger and the Security Research Project. This research experience broadened his studies into the area of retail security, employee theft, and shoplifting. The funding and ideas for this dissertation were born directly out of his employment and strong mentoring relationship with Richard C. Hollinger and the Security Research Project.

He has recently joined the faculty of Georgia State University as an assistant professor of criminal justice. In addition to continuing his research on drug use among medical professionals, he intends to expand his research interests in the broader substantive area of workplace deviance and substance abuse.




I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Richard C. Hollinger, Chair  
Associate Professor of Sociology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Ronald L. Akers  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



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For example, there is considerable literature that focuses on the issue of substance use and abuse among nurses. In 1984, the American Nurses Association (ANA) released a document stating that 8-10% of the 1.7 million practicing nurses in this country are dependent on drugs or alcohol (ANA, 1984). This study was followed by the Michigan Nurses Association's (MNA, 1986) estimates that one in every seven nurses will abuse drugs during his or her career.

There also have been several studies done on samples of nurses who were recovering from substance abuse (Bissell, 1981; Bogardus, 1987; Green, 1989; Hutchinson, 1986; Poplar and Lyle, 1969; Shaffer, 1987; Smith, 1989; Sullivan, 1987). While these studies are principally descriptive in nature, they present evidence that links the occupational culture of nursing to the recovering nurses' past substance use behaviors. This collection of research illustrates that nurses tend to use drugs for self-medication purposes, that nurses are often aware and cover up for the substance use behaviors of fellow nurses, and that the high stress/high drug access nature of the job feeds the progressive substance use.

My own research on drug use among nurses (Dabney, 1995a, 1995b) identifies numerous social factors associated with nurses drug use. In interviewing 25 nurses from various critical care settings, I found that on-the-job therapeutic drug use (i.e., self-medication) was common and accepted within the nursing work groups. The data show a multitude of personal, eyewitness, and hearsay accounts wherein nurses used nonnarcotic, prescription drugs such as Valium, Darvocet (nonnarcotic analgesic), and various Codeine-based medications. These behaviors were excused on the basis that they were medicinal in nature (i.e., helped the nurse perform his/her work duties) and involved what were perceived as less threatening/addictive nonnarcotic prescription medications.<sup>9</sup> It

present inquiry will attempt to assess the ways in which pharmacists internalize professional norms and how formal and informal self-regulation are related to drug use behaviors.

Studies of recovering substance abusing pharmacists (Bissell et al., 1989) suggest that pharmacists go to a great lengths to cover up their drug use behaviors from detection by others. The individuals interviewed emphasize how they feared informal sanctions from their peers in the way of professional ostracism. However, there was also significant emphasis placed on the fear of formal sanctions from their employers (i.e., termination) and regulatory agencies within the profession (i.e., actions against their license by the State Board of Pharmacy). In short, fear of perceived informal, negative sanction and formal regulatory response encourage the abuser to hide their substance use, thereby allowing it to intensify.

The salience of these perceived sanction threats has been questioned by some researchers. Data has repeatedly shown that, despite their disapproval and negative value judgments, pharmacists are very reluctant to report drug related wrongdoings among their peers. This fact can clearly be seen in the research on pharmacy students (Miller et al., 1990; Normack et al., 1985b; Szeinbach & Benjamin, 1990; Woodward et al., 1995) as well as practicing pharmacists (Chi, 1983; Epstein, 1990, 1991; Sheffield et al. 1992). For example, Woodward et al. (1995) presented pharmacists with a series of vignettes intended to assess their reactions to peers who drink alcohol. The results show that the pharmacists clearly disapproved of heavy drinking and viewed peers who did this as less attractive, un-professional, and un-trustworthy. However, there was very little evidence suggesting that the pharmacists would act upon their disapproval and formally report the heavy drinking behavior of their peers.

This noninvolvement tendency was supported in a study on retail pharmacists' reactions to theft and illegal substitution practices by their peers. Wertheimer & Manasse (1976) found work group norms to be tolerant of deviant behaviors such as the theft, use, or substitution of drugs by pharmacists. Based on their observations, these researchers conclude that "the deviant behavior exhibited by the violator pharmacist yielded no known rejection of those pharmacists by their peers in the population studied" (Wertheimer & Manasse, 1976, 232).

Similarly, studies of various forms of deviance within other health care professionals further illustrate that deviant medical professionals usually overestimate the likelihood that their peers will come forward and report the wrongdoings to others. For example, Rosenthal (1995) illustrates how doctors often cover up for obvious incompetence or malpractice of their peers. She attributes doctors' tendency to cover up or "turn the other cheek" to a combination of several factors. First, she points out that there exists a certain fraternal obligation between doctors. Faced with perceived misunderstandings and pressures from nonmedical regulators, the individual doctor is more likely to protect the back of his/her troubled peer instead of sending him/her to the proverbial "wolves." Second, she argues that doctors do not like to deal with the pressures associated with blowing the whistle on a suspected wrongdoing of a peer. In short, coming forward means getting involved in the investigation and inquest issues and doctors would rather avoid these time and stress laden confrontations.

Elliot Freidson (1970, 1975), a noted authority in the area of professional socialization, also speaks to this paradox of informal norms of conduct and fraternal allegiance among doctors. He argues that professional socialization emphasizes group support and group protection. He points out that these ideals make for problematic situations